

## **CERTIFICATION RULES**

### **NF MARK - FIRE SAFETY PVC PIPES & FITTINGS - COATED TEXTILE SUPPORTS**



AFNOR Certification identification no.:

NF513

Ref. written by ST - LNE

Review no. 4 – November 2019

Approved by AFNOR Certification: 17 December 2019

First applied: June 2009

Reference document:

GENERAL RULES OF THE NF MARK

Approved by the President of AFNOR on 23 April 2012

Founded in 1938, the NF mark is a collective certification mark, with the object of certifying the compliance of products with national, European and international standard documents covering them, and which may be complemented by additional specifications, in conditions defined by the certification reference standards. It is granted by AFNOR Certification and its network of partner bodies, making up the NF network.

The NF mark is a voluntary product certification mark; it satisfies the requirements of the Code de la Consommation, notably by associating the interested parties with the validation of the certification reference standards, by defining marking rules for certified products and by clear and transparent communication on the main characteristics certified.

The right to use the NF mark is granted on the basis of compliance with one (or more) standard(s) and more generally to the whole certification reference standard, for a product coming from an applicant and a designated design and/or manufacturing and/or marketing process. Attribution of the right to use cannot in any circumstances substitute LNE's responsibility for that which is legally incumbent upon the company holding the right to use the NF mark.

The NF mark checks the characteristics covering the safety of persons and goods, the suitability for use and the durability of products, as well as any additional characteristics enabling products to be distinguished in the market.

The documents applicable in this certification are:

- the general rules of the NF mark laying down the general organisation and conditions of use of the mark,
- these certification rules which define, in part 2, the technical characteristics to be respected.

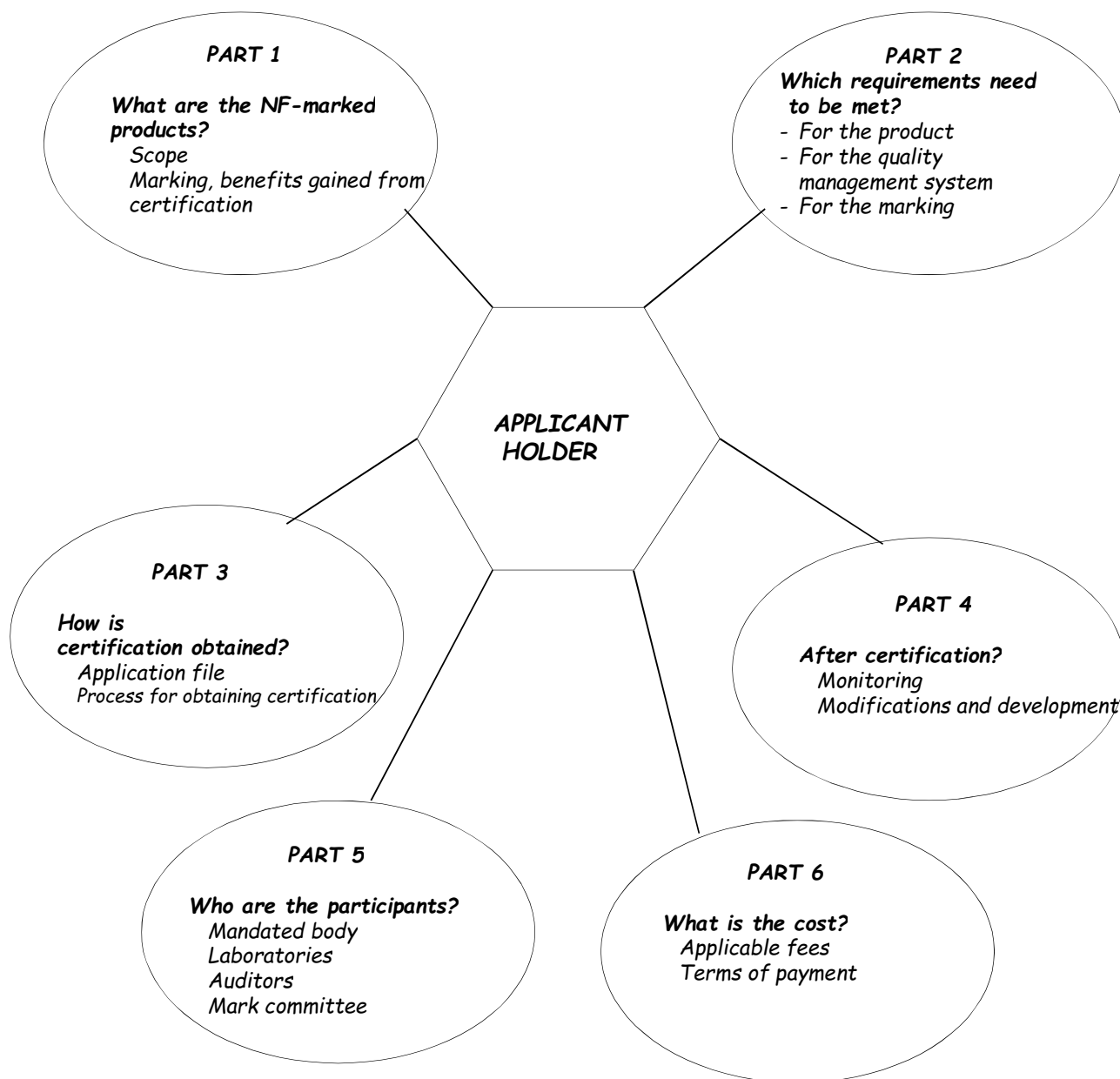
In accordance with the General Rules of the NF mark, AFNOR Certification entrusts the management of the mark NF 513 to LNE, known as the mandated certifying body.

LNE is responsible to AFNOR Certification for operations which are entrusted to it and are covered by a contract with AFNOR Certification.

Reminder\*:

It is specified that all products or services must satisfy the regulations, independently of any certification application, concerning for example forgery, compliance and safety requirements, etc.

## CERTIFICATION RULES



**Who should you contact?**  
**LABORATOIRE NATIONAL DE METROLOGIE ET D'ESSAIS (LNE)**  
Pôle Certification Plurisectorielle  
1, rue Gaston Boissier - 75724 PARIS CEDEX 15 – France  
Website : [www.lne.fr](http://www.lne.fr)

**Your contact:** Ségolène THEVENET  
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These certification rules were submitted for the approval of AFNOR Certification for acceptance in the NF certification system. They have been approved by the Legal Representative of AFNOR Certification.

They cancel and replace all previous versions.  
Hence the certification rules can be revised, in part or in whole, by LNE after consultation with the interested parties.

## UPDATING

Certification Rules	Updating	Revision	Date
Entire document	Change of title to include coated textile supports. Editorial changes. Creation of the two technical documents produced: - DT1 Group: PVC Pipes and Fittings - DT2 Group: Coated textile supports	4	November 2019
Part 1: Scope- Marking	Deletion of the reference to the NF48/2-4 mark	4	November 2019
Part 2: Quality requirements to be met by the manufacturer	Integration of technical product specifications in the associated Technical Documents. § 2.2. Requirements for the quality management system: taking into account the ISO9001:2015 standard	4	November 2019
DT1 Group: PVC Pipes and Fittings	Integration of the specific requirements for PVC Pipes and Fittings products from all parts of revision 3 of the NF513 mark. Integration of the measurement of the minimum thickness required for PVC pipes. Integration of the subcontracting of the expansion test in the cone calorimeter Specification of the frequency of self-checks to be carried out by the applicant/holder. Precisions of the sample methods	4	November 2019
DT2 Group: Coated textile supports	Creation	4	November 2019
Part 3: Obtaining certification	§ 3.1.2 Updating the documents to be provided as part of an application for certification.	4	November 2019
Part 4: Certified product surveillance process modifications and changes	§ 4.1.1.1 Requirements concerning the quality management system: taking into account the ISO9001:2015 standard	4	November 2019
Part 5: Participating organisations	§5.5.2 Modification of the composition of the committee following the integration of the Coated Textile Support products.	4	November 2019
Part 6: Applicable fees- Terms of Payment	§ 6.1.2 Cross-reference to the price list for the accommodation and travel expenses conditions	4	November 2019

## **CERTIFICATION RULES**

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## **PART 1 SCOPE – NF MARKING**

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#### **1.1 Scope**

#### **1.2 Definitions**

#### **1.3 NF Mark**

#### **1.4 Certified products**

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## 1.1. SCOPE

The products covered by the certification rules are:

- PVC pipes for residual water<sup>1</sup> evacuation applications inside buildings with overall wall thicknesses that are equal to or greater than those defined by standards NF EN 1329-1/NF EN 1453-1 (metric series);
- PVC fittings for residual water<sup>1</sup> evacuation applications inside buildings with overall wall thicknesses that are equal to or greater than those defined by standard NF EN 1329-1 (metric series);
- PVC accessories for residual water<sup>1</sup> evacuation applications inside buildings that do not come under standard NF EN 1329-1 and which have wall thicknesses that are equal to or greater than those defined by standard NF EN 1329-1 for sockets.
- Coated textiles supports

It is the responsibility of the applicant/holder to ensure that the regulations applicable to its product are respected.

The applicant/holder is solely responsible for the compliance of its products; LNE inspections cannot replace the responsibilities of the applicant/holder.

The principal characteristic certified within the scope of the NF-Fire Safety mark is the expansion in a cone calorimeter.

## 1.2. DEFINITIONS

### Applicant/Holder:

Artificial Person who manages and/or is responsible for compliance with all of the requirements defined in these certification rules of the NF Mark.

These requirements cover at least the following stages: design, manufacture, assembly, quality control, marking, packaging and putting on the market, and specify the critical points at each stage.

If the applicant/holder is not established in the European Community he should appoint an agent.

### Authorised agent:

Artificial or Natural Person established in the European Economic Area (E.E.A.) who acts as representative of the applicant/holder outside the E.E.A. and has a written mandate from the latter meaning that he can act in its name in the NF mark certification process according to the provisions of the certification rules.

The authorised agent may be too the distributor or importer of certified products, in which case his different responsibilities must be clearly identified.

### Distributor:

Artificial Person distributing the applicant's/holder's or its authorised agent's products who does not act upon the product or its packaging. If the distributor puts NF products on the market independently of the agent, he takes responsibility for the verification of the conformity with the NF certification rules and the applicable standards.

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<sup>1</sup>The term "residual water" is to be understood in the meaning of standard NF EN 12056-1 (2000).

The types of distributor may be as follows:

- distributors who distribute the product under the trademark of the holder. In this case, no action is to be taken with regard to the NF Mark.
- distributors who distribute the product with a change in trademark. The applicant/holder and the distributor must apply to maintain the right to use.

### 1.3. NF MARK

The NF Mark is materialised by the monogram below:



The marking conditions for products, packaging and technical and commercial documents are defined in Part 2

The graphics rules for the NF mark are available on request from LNE.

The purpose of the marking rules is to guide the holder in how to meet the regulations and the requirements of the NF certification. The general rules of the NF mark specify the conditions of use, of validity and the penalties in the event of abusive use of the NF mark.

Without prejudice of the sanctions laid down in the General Rules of the NF mark, any incorrect announcement of the certified features and any fraudulent use of the NF logo expose the holder to lawsuits for fraud and/or misleading advertising.

### 1.4. CERTIFIED PRODUCTS

The list of certified products is available on the website [www.lne.fr](http://www.lne.fr), using the certificate search engine, under "Certification", "Product certificates issued by LNE".

On request, LNE can provide information regarding the validity of a given certificate.

## **CERTIFICATION RULES**

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#### **PART 2**

### **REQUIREMENTS TO BE MET BY THE APPLICANT/HOLDER**

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- 2.1. Requirements concerning products**
- 2.2. Requirements concerning the quality management system**
- 2.3. Requirements concerning marking**
- 2.4. Applicant's/holder's commitments**

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## **2.1. REQUIREMENTS CONCERNING PRODUCTS**

### **2.1.1- REFERENCE DOCUMENTS**

The list of reference standards is specified for each product group in the attached technical documents.

### **2.1.2. PRODUCT SPECIFICATIONS**

The products must meet the specifications defined in the attached technical documents with each product group covered by NF Fire Safety certification (these documents have the same revision index as these certification rules n°4)

Technical Document No. 1: PVC Pipes and Fittings Group

Technical Document No. 2: Coated Textile Supports Group

## **2.2. REQUIREMENTS CONCERNING THE QUALITY MANAGEMENT SYSTEM**

The holder shall implement all the necessary means to ensure that the product complies with these certification rules at all times. In addition, he/she must ensure the control of external service providers by any means of evaluation of all the constituent elements of the product or outsourced service(s) for which he/she is an applicant or the holder of the right to use the certification mark.

This paragraph lays down the minimum provisions that the holder must put in place in terms of quality management in order to ensure that the products that benefit from the NF mark are permanently manufactured in compliance with the certification rules.

The quality system is based in part on the implementation by the holder of a set of organisational provisions allowing to control the conformity with standards and additional specifications, if any, of the delivered products. These provisions are described in paragraphs 2.2.1 and 2.2.2.

The applicant/holder must have implemented the means whose effectiveness is assessed on the basis of the requirements of the ISO 9001 revision 2015 standard.

The audits are carried out according to the following Table 1. This table indicates the specific requirements of the ISO 9001 standard that must be verified as part of the certification process.

If the manufacturing unit has a quality management system certified in accordance with ISO 9001 standard, the audit period is reduced (see provisions in part 3 §3.2.2.1 and part 4 §4.1.1.1.a). Thus, only the requirements identified on a "shaded" line in Table 1 are systematically verified in the audit.

If the manufacturing unit is not ISO 9001 certified, the applicant/holder must justify the effective implementation of a set of organisational provisions and a production control system allowing to control the conformity with the standards and additional specifications of the delivered products meeting at least the requirements of the present certification reference frame. In this case, all the requirements in Table 1 are verified.

## 2.2.1. APPLICABLE GENERAL REQUIREMENTS

§ ISO 9001: 2015	APPLICABLE MINIMUM	EXPECTED EVIDENCE	REQUIREMENTS (NA = Not Applicable)
<b>5. Management responsibility</b>			
5.3.	5.3. Roles, responsibilities and authorities within the organisation	<ul style="list-style-type: none"> <li>* Organisational chart;</li> <li>* Description of responsibilities and authorities (examples: organisational chart, job descriptions, etc.);</li> <li>* Appointed person responsible for ensuring the efficient organisation and implementation of the production system.</li> </ul>	<p>For persons in charge of controls or at production stages having a direct impact on the critical points in the realisation of the product as well as the release of the product and the evaluation and processing of the non-conforming product.</p> <p>All items except: * ISO 9001 V15: §5.3 c,d</p>
<b>7. Support</b>			
7.1.4.	Environment for process implementation	<ul style="list-style-type: none"> <li>* Evidence of maintenance of the work environment.</li> </ul> <p>Examples: weatherproof storage of the product and its components, suitable ambient conditions, etc.</p>	For processes related to the realisation of products/services.
7.1.5	Resources for monitoring and measurement	<ul style="list-style-type: none"> <li>* List of control, measuring and test equipment used on the product/service site and/or in the laboratory,</li> <li>* Identification of equipment to determine its validity,</li> <li>* Known measurement uncertainty of the equipment compatible with the required measurement capability,</li> <li>* Schedule for the verification or calibration of equipment affecting the validity of results (in particular equipment for carrying out tests on certified characteristics);</li> <li>* Evidence of verification and/or calibration (e.g. life record, verification or calibration report, etc.),</li> <li>* Proof of connection to national or international standards (where possible),</li> <li>* Evaluation of the validity of previous measurement results when equipment is found not to comply with the requirements. The holder/applicant must take appropriate action on the equipment and on any affected product. These actions must be recorded.</li> <li>* Validation of software used for monitoring and measuring the specified requirements, where applicable.</li> </ul>	For processes related to the realisation of products/services
7.2.	Skills	<ul style="list-style-type: none"> <li>* Determination of the skills required of personnel performing work that affects the quality of the finished product;</li> <li>* Compliance with test methods and control provisions.</li> <li>* Planned actions to acquire skills (training, tutoring, etc.), if applicable;</li> <li>* Ensure maintenance of skills.</li> </ul>	For persons in charge of inspections or having a direct impact on the critical points of product realisation.

§ ISO 9001: 2015	APPLICABLE MINIMUM	EXPECTED EVIDENCE	REQUIREMENTS (NA = Not Applicable)
7.5.	Documented information	<ul style="list-style-type: none"> <li>* List of internal and external documented information.</li> <li>Examples: Procedures, operating procedures, test method, inspection instructions, quality records.</li> <li>* Evidence of mastery of internal and external documents.</li> <li>For example: Availability of the applicable version of the test method, reference frame, control provisions, etc.</li> <li>* Review and update documents as necessary.</li> </ul>	For processes related to product realisation
<b>8. Carrying out operational activities</b>			
8.4.	Control of products and services provided by external service providers	<ul style="list-style-type: none"> <li>* List of suppliers and providers,</li> <li>* Contract / order defining the requirements of the applicant / certification holder,</li> <li>* Evidence of verification of raw materials, components, services purchased,</li> <li>* Evidence of verification of subcontracting conditions: transport, handling, testing, etc.</li> </ul>	For raw materials, purchased components and for external services that affect the quality of the product/service. External service providers: <ul style="list-style-type: none"> <li>* supplier of raw materials, components, services integrated in the product/service</li> <li>* subcontractor of external services (e.g. testing, handling, transport, etc.)</li> </ul> (*) Special case of applicants/holders subcontracting part of their production: LNE audits the sub-contractors (as provided for in the certification standard). All items except: * ISO 9001 v15: § 8.4.1.
8.5.1.	Control of production and service provision	<ul style="list-style-type: none"> <li>* Definition of the means of production and manufacturing parameters at each stage of production,</li> <li>* Information defining the characteristics of products and services.</li> <li>Examples: product plan / service description, etc.,</li> <li>* Information defining the activities to be carried out and the results to be obtained.</li> <li>Examples: operating mode(s), work instruction(s), test method(s), certification reference frame (expected performance).</li> <li>* Monitoring and measurement activities.</li> <li>Examples: Monitoring plan, control procedures and instruction(s), test methods, etc.</li> <li>* Retention of documented information demonstrating the conformity of the products/services with the acceptance criteria (Idem § 8.6. ISO 9001 v15)</li> </ul>	For processes related to the realisation of products/services

§ ISO 9001: 2015	APPLICABLE MINIMUM	EXPECTED EVIDENCE	REQUIREMENTS (NA = Not Applicable)
8.5.2.	Identification and traceability	* Identification / Marking of the product in accordance with the requirements of the present Certification reference frame, *Marking of commercial documents in compliance with the requirements of this Certification reference frame.	The identification of the product must make it possible to ensure traceability and to trace the history of the product back to the batches of materials used, records of inspections carried out on reception, during manufacturing and on the finished product.
8.5.4.	Product preservation	Verification that the product is preserved throughout the production chain (identification, handling, storage, packaging, transport, etc.) in order to ensure the conformity of the product with the specified requirements.	For processes related to the realisation of products/services
8.5.6.	Control of changes in production / service provision	* Evidence of control over changes in the manufacturing process / service provision, including the impact of changes on product performance: - review of changes, - person authorising the modification and all necessary actions.	For processes related to the realisation of products/services
8.6.	Product and service release	* Arrangements for product inspection; recording of inspection results and compliance with acceptance criteria; * Names of persons who authorised the release of the finished products/services.	For processes related to the realisation of products/services
8.7.	Control of non-conforming elements	* Provisions for handling non-conformities, including customer complaints, and implementation of these provisions; *No exemption allowed on a performance of a certified feature;	The holder/applicant must ensure that any product that does not comply with the specified requirements is identified and controlled so that it cannot be used or delivered unintentionally.
<b>9. Performance evaluation</b>			
9.3.	Management review	* Management review report	
<b>10. Improvement</b>			
10.2.	Non-conformities and corrective actions	* Determine the cause(s) of non-compliance, * Determination and implementation of corrective actions to deal with nonconformities on the certified product and customer complaints; * Effectiveness of the actions implemented.	Records highlighting complaints about certified products and their treatment must be made and kept.

No acceptance by exemption can be considered for a product under the NF Mark.

## 2.2.2. SPECIFIC QUALITY REQUIREMENTS

### 2.2.2.1. Inspections and tests

The holder must have the means necessary for the inspections and tests defined by the standards and additional specifications cited in paragraph 2.2 of these certification rules and in the technical documents relating to each product group.

The holder undertakes to carry out a reliable and regular inspection of its production. The inspection operations are organised in three phases:

- Inspections and tests on reception;
- In-process inspections;
- checks and tests carried out on finished products.

#### a. Inspection and tests on reception

The holder is required to carry out an inspection on reception and in any case before use, on all the components used in the manufacturing of its certified products.

This inspection, the content of which may vary according to the internal control structure of the holder and the regulatory guarantees provided by its suppliers, generally includes:

- inspections on reception to allow the delivery to be accepted;
- quality controls to ensure that purchased products are implemented after validation of their conformity to purchase specifications.

The method of taking the samples necessary for the inspections must be described precisely in the holder's quality plan.

This inspection can be simplified if the holder contractually imposes a systematic pre-delivery inspection carried out by his/her supplier(s) and if he/she has the resulting analysis sheets for each batch delivered, or if the supplier is certified according to the NF EN ISO 9001 standard: 2015 for the products concerned, or if the products are certified.

The inspections carried out must be recorded with an indication of the acceptance criteria and the decisions taken in the event of non-compliance.

#### b. In-process inspection

An in-process inspection shall be organised by the applicant/holder. It concerns the product in its intermediate states at the main stages of its manufacturing and the follow-up of the instructions for adjusting the production equipment (manufacturing machines, tools). Inspection instructions must be formalised and made available to operators.

These inspections must be recorded with an indication of the acceptance criteria and the decisions made in the event of non-compliance.

#### c. Inspection and testing of finished products

The holder is obliged to check the characteristics of the finished products before delivery; he/she is responsible for organising this inspection.

Inspections and tests on products carried out by the holder are carried out in accordance with the standards and additional specifications cited in the technical documents of these certification rules. The test procedures have to be followed.

The measurements of the various characteristics controlled are carried out according to the procedures defined in the reference standards cited in the technical documents relating to each product group and family.

Inspections on finished products are carried out by the holder him/herself at the place of production.

Organisation of the inspection on finished products:

The holder will be obliged to take samples at the end of the production line and carry out inspections and tests on these samples. The samples taken must reflect a varied sampling of the dimensions of the products, objects of the mark.

The method of taking the samples required for the tests shall be precisely described in the holder's quality plan.

These inspections must be recorded with an indication of the acceptance criteria and the decisions taken in the event of non-compliance.

The applicant/holder shall specify and define the methods for blocking the products pending test results and the methods for unblocking them after obtaining the test results.

Shipment of products to the customer shall not be made until all planned arrangements have been satisfactorily completed.

The case of the subcontracting of testing:

The outsourcing of certain tests is possible provided that it does not cause any disruption in the manufacturing process (due to response time for example).

The conditions of subcontracting must be formalised (definition of subcontractor, frequency of tests, response times requested, communication of results in writing, procedure to be followed in the event of non-compliance).

In this case, LNE reserves the right to audit the sub-contracting laboratory to check compliance with the provisions laid down.

Exploitation of results:

The test results must be exploited by the operator him/herself or the person responsible to whom he/she sends them in order to check at least whether or not they comply with the internal specifications and the specifications of these regulations.

**2.2.2.2. Provisions to be taken in the event of a change in the nature of the components (new formulation)**

Any change in the chemical nature of the components must be reported by the manufacturer to LNE. This change calls into question the maintenance of the formulation.

In the case of PVC pipes and fittings, this change may result in particular in a change in the LOI reference value outside the values specified by the manufacturer, requiring the product to be considered as a new product and must be subject to an extension application for modification.

NOTE: A change of supplier does not in itself constitute a formula change.

### **2.2.2.3. Checks and/or calibration, and maintenance of test and measuring inspection equipment**

The equipment (in particular, limiting oxygen index measuring device, cone calorimeter and electric burner) must be in working order, so that LNE can have confidence in the performance of the tests carried out during the manufacturer's internal inspection.

If serious faults are observed in the equipment during a routine audit which casts doubt on the reliability of the tests carried out at the manufacturer's premises, LNE shall inform the manufacturer thereof and ask him/her to carry out corrective action immediately.

If there should be another unsatisfactory observation during an additional audit, possibly following a proposal from the Mark Committee, or during the following six-monthly audit, the right to use the NF Mark may be suspended, after obtaining the opinion of the Mark Committee.

### **2.2.2.4. Customer complaints**

A record of customer complaints about NF certified products must be kept and must show how they have been dealt with. In this record the holder must keep:

- a record of all complaints and recourses;
- a record of the action taken;
- a record of the corrective actions taken when complaints have identified a manufacturing defect.

## **2.3. REQUIREMENTS CONCERNING MARKING**

Marking is an integral part of the certification of a product.

Beyond the identification of a certified product and its traceability, the marking of a product with the NF logo ensures better protection of the users and enables holders to be protected against unauthorised use and forgery.

Without prejudice of the sanctions laid down in the General Rules of the NF mark, any incorrect announcement of the certified features and any fraudulent use of the NF logo expose the holder to lawsuits for fraud and/or misleading advertising.

Copying of and marking with the logos of AFNOR, AFNOR Certification, and LNE is strictly forbidden without prior authorisation from these bodies.

The NF certified product must bear a designation and identification distinct from non-NF certified products. The holder must only use the NF logo to distinguish NF certified products, without risk of any possible confusion with other products, particularly with non-NF certified products.

It is recommended that the holder submit all of the documents relating to the NF mark to LNE beforehand.

**REMINDER:**

*Article R 433-2 of the French Consumer Code stipulates that:*

*"When reference is made to certification in advertising, labelling or presentation of any product or service or in associated commercial documents of any kind, the following information must always be brought to the consumer's or user's attention:*

- the name or corporate name of the certifying body or the collective certification mark,*
- the denomination of the certification reference standard used,*
- the modalities according to which the certification reference standard can be consulted or obtained."*

The applicants/holders of the Mark must register at LNE's Environment, Safety and Performance Certification Division – 1, rue Gaston Boissier in Paris:

- their logo;
- the different technical and/or commercial references under which the products accepted to the Mark are marketed.




### 2.3.1. MARKING OF THE PIPES

The marking of the products are specified in the technical annexes for each group.

### 2.3.4. ADDITIONAL MEASURES

Measures must be taken by holders to let the users know the following information (manufacturers can choose the methods they employ: information sheet, commercial documents, websites, etc.):

- collective certification mark: logo ,
- identification of the reference standard forming the basis of the certification (NF 513 certification rules), as well as the following statement:  
"the certification rules are available on the LNE website [www.lne.fr](http://www.lne.fr)".
- the main certified characteristic – i.e. expansion in the cone calorimeter.

These provisions are considered satisfactory if the communication includes a copy of the certificate.

Specimen Information Label:

 <b>FIRE SAFETY: NF Me PVC PIPES &amp; FITTINGS</b>	
<ul style="list-style-type: none"><li>• Holder's identification:<ul style="list-style-type: none"><li>- Name - Address:</li><li>- NF identification no.:</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Pipe or connector identification:<ul style="list-style-type: none"><li>- reference:</li><li>- Batch no.:</li></ul></li></ul>
<b>PVC PIPES (OR FITTINGS) CONFORMING TO THE NF 513 CERTIFICATION RULES</b>	
<b>MAIN CERTIFIED CHARACTERISTIC:</b> - Expansion in the cone calorimeter.	
The NF 513 certification rules are available on the LNE website: <a href="http://www.lne.fr">www.lne.fr</a>	

### 2.3.5. MARKING ON DOCUMENTATION (TECHNICAL AND COMMERCIAL DOCUMENTS, POSTERS, ADVERTISING, WEBSITES, ETC...)

References to the NF mark in documents (order confirmations, invoices, delivery slips, advertising leaflets, catalogues, etc.) must be made in a way that avoids any risk of confusing certified products with others.

The NF Mark must be reproduced on documents and advertising in compliance with the requirements below depending on the products:



**FIRE SAFETY: NF Me  
PVC PIPES & FITTINGS**

Or



**FIRE SAFETY: NF M2  
COATED TEXTILE SUPPORTS**

Prior to publication, it is recommended that the holder submit any sales document bearing the NF Mark, including modifications of said documents, to LNE.

The holder must send, on request from LNE, any document in which reference is made, directly or indirectly, to the NF mark.

## 2.4 APPLICANT'S/HOLDER'S COMMITMENTS

***The applicant/holder endeavours generally to give LNE the means to proceed in operations necessary to the good process of the evaluation and the follow-up of its file and in particular to:***

- constantly meet the requirements defined by these certification rules, and to implement the necessary changes in the timeframes set by LNE in the event that the certification rules change,
- give the representatives authorised by LNE the information and working documents necessary to the good progress of the evaluation;
- only communicate information which the applicant/holder assures is loyal and sincere;
- designate a supervisor as LNE's special contact person;
- designate recipients within the company for the receipt of test reports and audit reports from LNE and inform LNE of changes to be taken in case of a change of recipient within the company or change of email address;
- introduce to LNE's authorised representatives the personnel assigned to the different missions;
- give its personnel all the instructions required so that it collaborates with the authorised representatives and accepts to participate in whatever interview;
- provide authorised LNE representatives with means of access and transportation within the sites and buildings being audited, including sites of sub-contractors if necessary;
- inform authorised LNE representatives of the health & safety instructions and measures applicable to the sites and buildings being audited and its personnel and put at their disposal whatever relevant equipment;
- pay LNE the amounts due for evaluation, in accordance with the financial conditions defined and accepted by the applicant/holder
- authorise the presence of an observer who is required to respect confidentiality. LNE may call for this observer, by standards or agreements of which it is a signatory. The applicant/holder is systematically informed of the presence of this observer by LNE prior to the audit.
- take the necessary measures if non-conformities are noted, within the timeframe stipulated by LNE,
- return to the audit manager the duly filled out non-conformity sheets, within 3 weeks from the last day of the audit.
- implement the actions required to enable the certificate to be granted within 11 months of the initial audit. Once this deadline has passed, a new audit will have to take place before certification.

- send to the mark laboratory the samples taken in the conditions defined in parts 3 and 4.

***It is also incumbent on the certificate holder to:***

- affix the NF mark on only the products covered by the certificates issued by LNE and which conform to the applicable requirements;
- not use the certification of its products in such a way that could harm the certification body nor make a declaration on the certification of its products that the certification body could consider misleading or unauthorised;
- inform LNE beforehand of any modification to the product and any information likely to affect conformity to the requirements of these rules, the assessment methods being defined in part 4,
- provide LNE with any data or information necessary to draw up and maintain the certificate;
- keep a record of all complaints the holder is aware of concerning the conformity of (a) product(s) to certification requirements, and to provide LNE with these records upon request, and
  - to take any appropriate action regarding these complaints and imperfections noted in the products which impact their conformity to the certification requirements.
  - to document the actions taken.
- stop making any reference to the certification of the products concerned and to stop using all of the means of communication making reference thereto in the event of suspension, reduction, withdrawal or refusal of renewal of the certificate,
- authorise follow-up authorisations to be carried out during the period of validity of the certificate, based on the frequency specified in part 4, in addition to any other duly justified supplementary evaluation.
- make declarations on the certifications in line with the scope of the certificate,
- not use the certification granted by LNE in a way which could damage LNE, nor make a statement on the certification of its products which LNE could consider as misleading or non-authorised;
- reproduce the certificates in their entirety, including appendices in the event of provision to a third party.

## **TECHNICAL DOCUMENT N°1**

### **CERTIFICATION RULES**

#### **NF MARK - FIRE SAFETY PVC PIPES AND FITTINGS- COATED TEXTILE SUPPORTS**



**GROUP: PVC PIPES AND FITTINGS**

#### **SUMMARY: SPECIAL REQUIREMENTS RELATING TO**

**PART 2: REQUIREMENTS TO BE MET BY THE APPLICANT/HOLDER**

**PART 3: OBTENTION OF CERTIFICATION**

**PART 4: CERTIFIED PRODUCT SURVEILLANCE PROCESS MODIFICATIONS  
AND CHANGES**

Rev. 4 - November 2019

## PART 2: REQUIREMENTS TO BE MET BY THE APPLICANT/HOLDER

### 2.1. REQUIREMENTS CONCERNING THE PRODUCTS

#### 2.1.1. REFERENCE STANDARDS

**ISO 5660-1** (December 2002) Reaction-to-fire tests - Heat release, smoke production rate and mass loss rate - Part 1: Heat release (cone calorimeter method).

**NF EN ISO 4589-2** (May 2017) - Plastics - Determination of burning behaviour by oxygen index - Part 2: Ambient temperature test.

**NF EN 1329-1** (2014 + A1: June 2018): Plastics piping systems for soil and waste discharge (low and high temperature) within the building structure – Unplasticized poly(vinyl chloride) (PVC-U) - Part 1: Specifications for pipes, fittings and the systems.

**NF EN 1453-1** (May 2018): Plastic piping systems with structured-wall pipes for soil and waste discharge (low and high temperature) inside buildings - Unplasticized poly(vinylchloride) (PVC-U) - Part 1: Specifications for pipes and the system.

#### 2.1.2. ADDITIONAL SPECIFICATIONS OF PVC PIPES AND FITTINGS

Concerning the PVC Pipes, Fittings and Accessories products covered by these certification rules, they must be classified at least B-s3, d0 in their reaction-to-fire according to standard NF EN 13501-1 and the assembly defined in standard NF EN 16000.

The samples tested must comply with the specifications defined in the following table:

Features Test methods	Specifications
1. Limiting Oxygen Index (LOI) NF EN ISO 4589-2	<u>Compact PVC:</u> Measured value lies within the reference range of a scope of $\pm 2$  <u>PVC with structured walls:</u> Measured value lies within the reference range of a scope of $\pm 3$
2. Expansion rate after cone calorimeter test (see § 2.1.3)	Expansion rate $\geq 800$

The LOI reference value is the one recommended by the applicant based on a number of tests that he/she considers representative.

The LOI reference range declared in the application file for admission or extension is defined by the applicant, with the following rules:

- each production family (cf. definition in § 3.1.1 of Part 3) must be subject to an SBI [single burning item] test with a declared LOI attached;
- the range necessarily frames the values measured on the productions submitted to the SBI test.

The LOI reference range is determined in the following 2 cases:

- as part of an application for admission;
- as part of an extension application for a new production family (or to amend a production family).

The LOI value declared in the application file for acceptance or extension may be subsequently adjusted several times within a maximum limit of 100% of the tolerances, but always relative to the LOI value initially declared, i.e. 2 points in compact and 3 points for structure-wall. However, the applicant/holder should provide proof that this adjustment does not constitute a new formulation.

For compact PVC fittings, the LOI value may vary depending on the thickness.

Thus, for the same production family of compact PVC fittings, the applicant/holder may declare a maximum of two different LOI values in nominal terms. These two LOI values declared in nominal terms may deviate from each other within a maximum limit of 2 points in compact.

A production of PVC pipes or fittings is defined as continuous if it is carried out on at least 50% of the days worked in a year for all the NF 513 certified production families.

Otherwise, production is defined as discontinuous.

#### **2.1.2.1. CONE CALORIMETER EXPANSION TEST METHOD (OR MERINGAGE TEST)**

##### **a) Principle**

This method consists of measuring the rate of expansion of a PVC test specimen during combustion under the action of thermal radiation.

For this purpose, a test specimen is placed under an electric cone calorimeter which emits radiation of  $(50 \pm 0,5)$  kW/m<sup>2</sup> at the surface of the test specimen.

##### **b) Definitions**

- Intumescence:

Intumescence characterises the increase in volume of the test specimen due to the effect of heat.

- Rate of expansion:

The rate of expansion (%) quantifies the intumescence of the test specimen with the following equation:

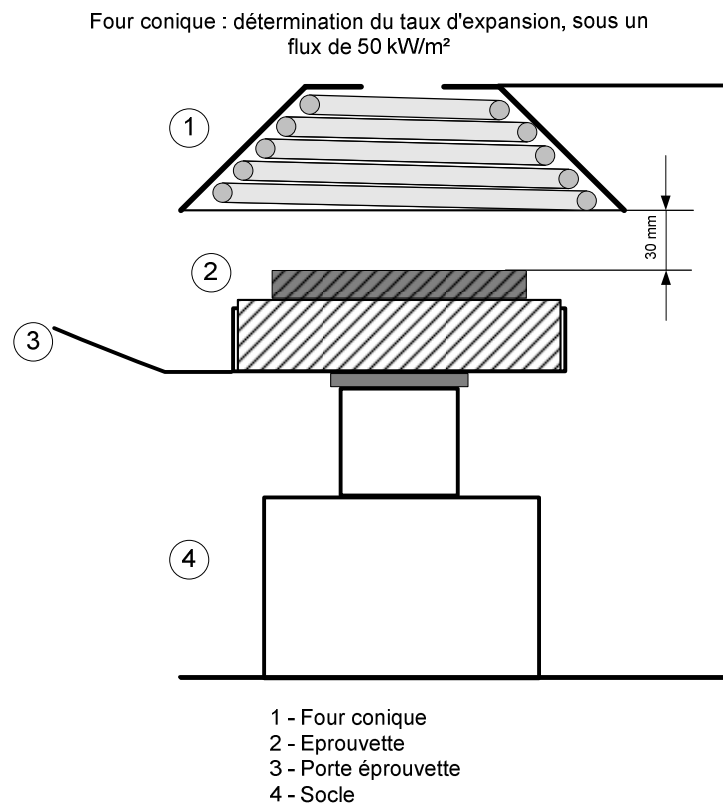
$$\text{Expansion} = 100 (E_f - E_i) / (E_i \cdot E_0)^{1/2}$$

E<sub>f</sub>: final thickness.

with E<sub>0</sub> = 3 mm E<sub>i</sub>: initial thickness.

### c) Test apparatus

#### - General:



**Figure 1**

The apparatus consists of a cone calorimeter of shape and dimensions in accordance with ISO 5660-1 standard (see figure 2 of the standard) positioned above the test specimen in such a way that the base of the resistance is  $30 \pm 0.5$  mm from its surface. This is placed on a test specimen holder conforming to ISO 5660-1 standard (see figure 3 of the standard).

A wedge is used to adjust the  $30 \pm 0.5$  mm. It is 30 cm long and 27 mm high along its entire length. It must be able to rest on the flat iron located under the resistance by passing through the centre of the cone calorimeter.

The non-combustible material, on which the test specimen is positioned, is housed in the test specimen holder in a raised position (see figure 1 above) in relation to the receptacle in which it is housed.

For test specimen holders without raised material, a (100x100x5) mm steel plate can be added to the bottom of the test specimen holder receptacle to allow zero adjustment with the wedge carousel.

The entire apparatus (see Figure 1) is placed in a ventilated fume cupboard (see below) for smoke extraction.

#### - Fume cupboard:

The fume cupboard must have a sufficient flow rate to allow adequate smoke extraction. This flow rate is related to the durability of the equipment and the safety of the operators and must operate continuously during the test.



- Fluxmeter:

A Schmittbolter type fluxmeter calibrated between 10 and 100 kW/m<sup>2</sup> and ½ an inch in diameter is used to calibrate the 50 kW/m<sup>2</sup> heat flow emitted on the surface of the test specimens.

- Multimeter:

The multimeter used must be calibrated or checked every 5 years on the range concerned, i.e. from -0 to 10mV.

#### **d) Sample preparation**

The test specimens are flat plates with dimensions (50x50 ± 1) mm made from a PVC pipe or fitting.

The plate is obtained after softening in an oven (125 to 150 °C) - (1min/mm thick), then cut to size (by machining or a lateral round hole-punch).

The average thickness [Ei] of the test specimen is measured with a micrometer. This average is obtained from 3 measurements. The measurements shall be distributed over the surface of the test specimen.

Five test specimens should be prepared:

For test specimens cut from tubes, they shall be cut on different generators in the current section of the tube. The test specimens must not be cut from the tulip of the tube.

The test specimens shall be tested on the outside (of the pipe or fitting) exposed to the heat flow.

#### **e) Conditioning of test specimens**

The test specimens are conditioned at room temperature (15 to 30°C) 1 hour before testing.

#### **f) Setting the device**

- Cone calorimeter:

Place the fluxmeter where the test specimen will be, 30 mm under the centre line of the cone calorimeter.

On the regulation system (P.I.D.) determine the temperature corresponding to the 50 kW/m<sup>2</sup> flow and wait for this to be reached before beginning the tests.

This operation must be carried out once every 6 months.

- Ventilation:

The test must be carried out in still air with a suitable extraction (see § c).

## g) Procedure

### - Initial preparation:

The calorimeter is stabilised at the heating capacity determined when setting the calorimeter.

### - Carrying out the test:

Place a sheet of aluminium foil on the specimen holder and then place the specimen in the centre with the inside of the pipe facing down.

Place the specimen holder in its location under the heat flow of the cone calorimeter. This must be 50 kW/m<sup>2</sup> at 30 mm from the top of the test specimen.

The aluminium sheet must be replaced for each test. It must be of sufficient size to be surrounded by the specimen holder to ensure that it holds it during the test (recommended size 130 mm x 130 mm for a specimen holder as described in ISO 5660-1, figure 3 of the standard).

### - Expansion test duration:

- Control time: reference duration defined by the manufacturer by monitoring production to reach the minimum average expansion rate defined by the current regulations. This less than optimal time is intended to reduce the duration of the expansion test. "
- Maximum expansion duration (known as "optimum time"): test period during which each test specimen must reach its maximum expansion point. This "optimum time", determined by the operator, is specific to each sample tested.

After ventilating and cooling the test specimen, the measurement is carried out using a ruler or a marking gauge.

### -Measurement of the expansion

Different types of expansion can be observed on samples. These forms can be grouped into two main families according to their shape and kinetic formation, as presented in the following table:

	Kinetics	Shape
Type 1	Vertical growth	The sample remains flat, plated or not on the support. The structure is vertical overall.
Type 2	Vertical growth and then tilting of the upper parts	The sample remains flat, plated or not on the support. The structure is sagged or curled.

The expansion measurement takes into account the distance covered by the head of the expansion for expansion having apparent expansion rates < 800%". The apparent expansion rate corresponds to the height of a Type 2 sample at the end of the test.

NOTE: LNE maintains a guideline document representing the different forms of expansion already observed as well as the corresponding measurement methods. This document is examined and validated by the Mark Committee.

- Expressing the results:

The measurements are expressed in expansion rate (see b).

- Acceptance conditions:

The average expansion rate over 5 specimens must be greater than or equal to 800%.

In the event of a non-conforming result, the non-conformity will undergo the procedure for processing non-conformities according to § 2.2.2.3.c).3.C. This procedure is used in the holder's laboratory and in the trademark laboratory if the expansion rate is less than 800%.

## **2.1.2.2. LOI TEST METHODS (NF EN ISO 4589-2 STANDARD)**

### **a) Obtaining test specimens for the LOI test (NF EN ISO 4589-2 standard)**

For factory inspection, the test specimens can be obtained

- A - By machining (sawing/milling) in a product
- B - By cutting out using a punch after softening

Special precautions for obtaining test specimens

A: The edges are then trimmed.

B: The test specimens must have been subject to conditioning at laboratory temperature for at least 2 hours before testing. The drying oven temperature enabling this cutting method should not exceed 155°C (heating time: 5 minutes).

Internal inspection tests can be performed on injected test specimens, but the verifications by the body, particularly during follow-up audits, are carried out on finished products. Only measurements taken on the finished products will be valid in the event of differences..

### **b) Dimensions of the test specimens (NF EN ISO 4589-2 standard)**

- . length: 70 to 150 mm.
- . width:  $6.5 \pm 0.5$  mm.
- . thickness: of the pipe or fitting being inspected.

### **c) Performing the LOI test**

The LOI test is performed in accordance with the provisions of NF EN ISO 4589-2 standard. The modification of the volume fraction of oxygen used initially is preferably 0.5%.

The values obtained during the internal inspection shall comply with Table 2.1.2.

In the event of a non-conforming result, the corresponding batches shall be declared non-conforming and shall undergo an appropriate non-conformity handling procedure (see § 2.2.2.3, c).

If examination of the inspection records reveals four consecutive<sup>1</sup> non-conforming LOI test results for a given family, verification of the constituent elements submitted to LNE as part of an application file must be checked.

### **2.1.2.3. MEASUREMENT OF MINIMUM THICKNESS REQUIRED**

The requirements defined in standards NF EN 1329-1 or NF EN 1453-1 concerning the minimum thickness required for PVC pipes and fittings must be respected.

NF055 or QB08 certified products are deemed to meet the requirements of standard NF EN 1329-1 in the case of pipes and fittings in compact PVC formulation or the requirements of standard NF EN 1453-1 in the case of pipes and fittings in structured PVC formulation.

Within the framework of the NF Fire Safety - PVC Pipes and Fittings mark, PVC fittings are not concerned by the minimum thickness control required.

Thus, for PVC pipes taken from the sample and not having one of the certifications mentioned (NF055 or QB08), the inspection of the minimum thickness required is carried out on site with the manufacturer's testing means or at the mark's laboratory.

The testing procedures are specified in the admission and certification follow-up.

The minimum wall thickness is measured in accordance with EN ISO 3126 standard (see EN ISO 3126 §5.2.2 Maximum and minimum wall thickness).

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<sup>1</sup> This condition applies to the results of inspections conducted at the minimum intervals set out by these certification rules (see § 2.2.2.3, c).

For pipes in compact PVC formulation, the requirements are as follows:

Nominal outside diameter DN (mm)	Minimum thickness e (mm)	Thickness Tolerances (mm)	
		e mini	e maxi
32	3.0	3.0	3.5
40	3.0	3.0	3.5
50	3.0	3.0	3.5
63	3.0	3.0	3.5
75	3.0	3.0	3.5
90	3.0	3.0	3.5
100	3.0	3.0	3.5
110	3.2	3.2	3.8
125	3.2	3.2	3.8
140	3.5	3.5	4.1
160	3.2	3.2	3.8
160	4.0	4.0	4.6
200	3.9	3.9	4.5
200	4.9	4.9	5.6
250	4.9	4.9	5.6
250	6.2	6.2	7.1
315	6.2	6.2	7.1
315	7.7	7.7	8.7

For pipes in structured PVC formulation, the requirements are as follows:

Nominal outside diameter ND (mm)	Minimum thickness e (mm)	Thickness Tolerances (mm)	
		e mini	e maxi
32	3.0	3.0	3.5
40	3.0	3.0	3.5
50	3.0	3.0	3.5
63	3.0	3.0	3.5
75	3.0	3.0	3.5
80	3.0	3.0	3.5
100	3.0	3.0	3.5
110	3.2	3.2	3.8
125	3.2	3.2	3.8
140	3.2	3.2	3.8
160	3.2	3.2	3.8
200	3.9	3.9	4.5
250	4.9	4.9	5.6
315	6.2	6.2	7.1

## **2.2. REQUIREMENTS CONCERNING THE QUALITY MANAGEMENT SYSTEM**

### **2.2.2. SPECIFIC QUALITY REQUIREMENTS**

#### **2.2.2.1. Inspections and tests**

The control plan must include at least the following tests and inspections:

##### **a) Inspection on reception (raw materials):**

The manufacturer must ensure that the raw materials delivered (PVC and flame retardants in particular) comply with the purchasing specifications, and establish the corresponding procedure.

##### **b) In-process inspection:**

The manufacturer must put in place all the necessary inspections to ensure the consistency of his/her formulation and establish the corresponding procedure.

The code of the reference formulation must be registered by the manufacturer.

Note = A reference formulation can be identified by several codes in production.

##### **c) Final inspection:**

###### **1. The LOI test**

The internal inspection is carried out with the oxygen index (LOI) measuring device, available on the manufacturing site; the manufacturer must be equipped with an LOI measuring device on the production site.

The minimum frequency of internal inspection is as follows: 1 LOI test per production family, per production campaign and at least once a week.

A manufacturing campaign means a clearly identifiable series of components manufactured consecutively under the same conditions, using a material or formulation conforming to the same specification (see 3.1.1 Application for the right to use the trademark, Definition of the term "production family").

It is specified that "under the same conditions" implies the same type of manufacturing process (extrusion or injection)

###### **2. The expansion test in the cone calorimeter**

The applicant/holder shall carry out an expansion test in a cone calorimeter as defined in § 2.1.3.

In the case of continuous productions (cf. §2.1.2), the frequency to be applied by the holder is as follows:

- In the case of an application for admission to the mark and following the initial audit, the frequency applied by the applicant/holder for the cone calorimeter expansion test shall be at least once per manufacturing month for 12 months or until a minimum of 10 test results are obtained.

If justified by the cone calorimeter expansion results obtained in continuous manufacturing inspections, the frequency applied and defined by the holder may be reduced.

- In monitoring certification, the frequency applied per production family for this inspection will have to be adapted by the holder according to the variability of its industrial process to ensure the continuity of the performance of the products placed on the market, in particular on the basis of the standard deviation noted on the results.

However, in the case of a non-conforming result for the cone calorimeter expansion test obtained in the production inspection carried out by the manufacturer, the frequency applied for this test shall be reduced to the cone calorimeter expansion test per manufacturing campaign for 6 months.

In the case of discontinuous production (cf. §2.1.2), the frequency applied by the applicant/holder is one test per manufacturing campaign and cannot be modified. The applicant/holder shall ensure that the batch conforms to the cone calorimeter expansion test prior to release.

The subcontracting of the cone calorimeter expansion test is possible provided that it does not cause any disruption in the manufacturing process (especially due to response time). In this case, the applicant/holder must inform LNE in advance.

The expansion test in the cone calorimeter can be subcontracted to the NF mark laboratory.

However, if several plants of the same group are under NF mark inspection, it is accepted that a single laboratory of the group may carry out the expansion tests in the cone calorimeter for all the plants of the group.

In all cases, the laboratory has test equipment in full compliance with the reference specifications. This laboratory is also subject to continuous monitoring.

The applicant/holder shall formalise the subcontracting arrangements and the conditions for carrying out the test. These should cover at least:

- the identification of the laboratory;
- the frequency of testing;
- the requested response times;
- communication of results in writing;
- the purchases,
- product identification and traceability,
- keeping records of the dispatch of samples for testing, with shipping orders, nature of the sample, date of production and dispatch of the sample,
- keeping records of reception of the results indicating the nature of the sample, the date of production, the date of the test and the results obtained.

NOTE: The heat flow exposure control time for each formulation shall be determined and set for a given formulation by the applicant/holder so as to achieve an expansion rate that meets the requirements. The value is then communicated to LNE during follow-up audits.

### 3. Batch release/blocking procedures

Following an LOI test in production inspection carried out at each manufacturing campaign, the question of batch blocking is to be analysed in the following 3 cases:

A/ Non-conforming LOI test result (weekly or daily)

A1/ Blocking of the batch concerned

A2/ Carrying out expansion tests in the cone calorimeter on the batch concerned:

A2a/ If the result of the expansion test is satisfactory, then release of the batch concerned.

A2b/ If the result of the expansion test does not comply, the batch is treated as non-compliant. Causes are investigated and corrective actions taken accordingly.

B/ LOI test result not in conformity for the 4th consecutive time (cf. § 2.1.4):

B1/ Treat the campaign and the batch concerned as in A

B2/ Investigation of causes and corrective action (for NC LOI)

B3/ Verification of the constituent elements of the file.

C/ Non-conforming expansion test result:

C0/ Blocking of the batch concerned

C1/ Tests on the basis of the control time on 5 test specimens.

C2/ Tests on the basis of optimal time on 7 new test specimens. The 2 extreme values, the highest and the lowest, are not taken into account: the calculation is made on the 5 remaining results.

C3/ Conformity decision

a If the result of the expansion test on the basis of the control time or the optimum time over 5 values is in compliance, then release the batch concerned.

b If the result of the expansion test remains non-compliant, the batch is treated as non-compliant. Causes are sought and corrective actions are taken

Following a cone calorimeter expansion test in production inspection, the batch processing methods are as follows:

D1/ Blocking of all batches still in stock since the last expansion test in the conforming cone calorimeter

D2/ Determination of the batches concerned by the non-conformity

D3/ Destruction of the batches concerned by the non-conformity

The inspections (on reception, in-process and on the final product) carried out must be recorded with an indication of the acceptance criteria and the decisions taken in the event of non-compliance.

The applicant/holder shall specify and define the methods for blocking the products pending test results and the methods for unblocking them after obtaining the test results.

The corresponding procedures must be documented.



#### 4. Preservation of samples

The objective is to have samples of different products since the last audit in order to carry out LOI and expansion tests on site during the audit as well as in the mark's laboratory.

The holder must put in place the necessary provisions so that the sampling of PVC pipes and fittings from each certified commercial reference can be carried out over a minimum of 6 production campaigns spread over all the production periods of the year, or failing that, over all the production campaigns carried out over the year.

For each manufacturing campaign, the quantities of samples to be available for sampling (see Part 4 §4.1.1.2. Samples) are as follows:

- for pipes: at least 2 whole pipes with traceability of the production campaign;
- for PVC fittings: dimensions and sufficient quantity to carry out 3 tests (LOI and expansion) on the samples kept.

#### **2.2.2.3. Checks and/or calibration, and maintenance of test and measuring inspection equipment**

They must be maintained, checked and/or calibrated regularly:

- The Limiting Oxygen Index (LOI) measuring device:

Checking the concentration of the gas mixture (frequency defined by the manufacturer).

In the event of a difference of 2 points between the result obtained during the visit to the manufacturer and the result obtained on the same sample inspected in the mark's laboratory, the manufacturer must have his/her equipment checked by the supplier.

- The cone calorimeter with the following minimum requirements:

Annual verification of the heat flow using a fluxmeter. The fluxmeter used must be calibrated at least every 5 years.

#### **2.2.2.6. Control of non-conforming products**

For PVC pipes and fittings, a product that does not comply with the cone calorimeter expansion test should not be marketed.

#### **2.2.2.7. Competence of the staff carrying out the LOI test**

An operator performing the LOI test is qualified to perform the test if one of the following conditions is met:

- The operator carrying out the LOI test has been trained to carry out the LOI test in an approved laboratory (LNE or laboratory accredited for the LOI test),
- The operator carrying out the LOI test has been trained by an operator who has him/herself been trained to carry out the LOI test in an approved laboratory (LNE or laboratory accredited for the LOI test),
- The operator was observed during audits carried out by LNE in the context of the NF 513 mark at least 6 times without any discrepancies relating to the implementation of the LOI test being noted.

The holder shall have evidence to demonstrate the acquisition of the knowledge necessary for the implementation of the LOI test and the fulfilment of one of the three conditions above.

## 2.3. MARKING REQUIREMENTS


### 2.3.1 PRODUCT MARKING

#### 2.3.1.1. PIPE MARKING




Each NF-certified pipe must be permanently, visibly and durably marked. For example, this marking can be made by moulding, engraving, affixing a label.

The NF logo, which complies with the requirements of the graphics rules and in accordance with the specific standards and regulations in force, is as follows:



Taking into account the technical constraints related to the marking of products, the logo  can be used in negative format

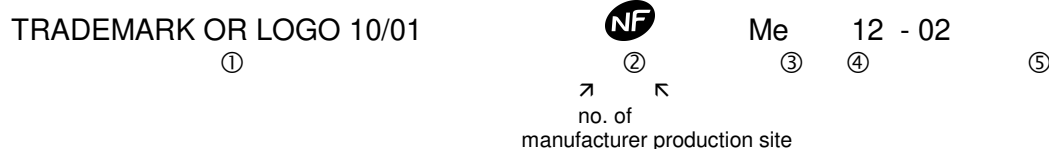
The marking of the pipes shall be carried out on a generator and shall include the following at least on every meter:

- ① the trademark (registered at LNE) and/or the manufacturer's logo if this is different from the manufacturer's trademark.
- ② the identification number of the manufacturer and of the production site assigned at the time of notification of admission (in the case of several factories).
- ③ the NF monogram. Holders may use:
  - either the new logo (in colour  or black and white) in line with the graphics rules,
  - or the new logo (in colour  or black and white) without stating "LNE certified" or the name of the application,
  - or, by way of derogation, when the use of the new logo presents technical and/or material difficulties, the old logo (colour  or black and white) without the words "LNE certified" and without the name of the application.
- ④ the word Me.
- ⑤ a marker to identify production: week (2 characters) or day (3 characters) and year of manufacturing (or batch number indicating the date of manufacturing: in the latter case, the definition of this number must be communicated to LNE).

NOTE: The means chosen by the manufacturer to reproduce the defined NF marking are left to the manufacturer's initiative and must allow visible, legible and permanent affixing.

Any other additional marking is permitted provided that the NF information sequence is not interrupted.

For example:




### 2.3.1.2. FITTING MARKING

Each NF-certified fitting must be permanently, visibly and durably marked. For example, this marking can be made by moulding, engraving, affixing a label.

The NF logo, which complies with the requirements of the graphics rules and in accordance with the specific standards and regulations in force is as follows:



Taking into account the technical constraints related to the marking of products, the logo  can be used in negative format.

#### (a) Compulsory information:

- for fittings with a diameter of  $\leq 50$  mm:



For small fittings ( $ND \leq 50$  mm) as well as for atypically shaped fittings, the NF logo does not have to be affixed.

Each fitting must be indelibly marked with the trademark or acronym registered by the manufacturer at LNE.

- for fittings with diameters  $> 50$  mm:

Each fitting must be indelibly marked with the following information (for atypically shaped fittings, the NF logo does not have to be affixed):

- ① the trademark and manufacturer's logo if said trademark is different from the latter's (logo registered at LNE);
- ② the manufacturer's identification number if said mark is different from the latter's (logo registered at LNE);
- ③ the NF monogram together with the letters Me. Holders may use:

- either the new logo (in colour  or black and white) in line with the graphics rules, followed by the letters Me.
- or the new logo (in colour  or black and white) without stating "LNE certified" or the name of the application, followed by the letters Me as defined below:



For example:

TRADEMARK OR LOGO 10/01


①

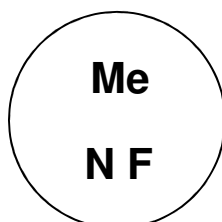


②

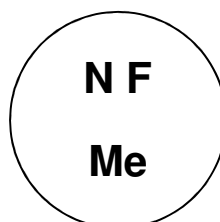
Me

③

- or by way of derogation, when the use of the logo  presents technical and/or material difficulties, the logo defined below, in a circle, in capital letters the same height as the rest of the marking, the letters NF associated with the letters Me as defined below:



or



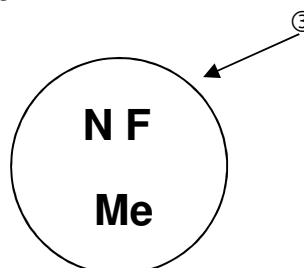
placed as shown:

*For example:*

TRADEMARK OR LOGO 10/1

①

②



(b) Recommended additional information (optional):


Each fitting may be marked with the following information:

- the manufacturer's identification number assigned at the time when authorisation to use the NF Mark was granted.
- the symbol identifying the material (PVC).
- a reference to identify the production.


(c) Marking of the primary packaging of fittings (compulsory information):

The following information must be indelibly marked on the primary packaging:

- the corporate name and/or registered trademark.
- the symbol identifying the material.

- the logo  (in colour or black and white) in line with the graphics rules, Due to imprecise printing technologies (industrial printer) and the small size of some primary packaging and labels, the words "LNE certified" and the name of the application may be omitted.

### 2.3.1.3. CASE OF PVC PIPES AND FITTINGS, COVERED BY THE NF055 MARK

Given the technical constraints related to the marking of products, the logo  can be used in negative format.

Some products may be covered by other applications of the NF mark, namely:

NF-Rigid, unplasticised PVC Pipes and Fittings for pressurised water networks, drainage networks, water evacuation and irrigation (NF055)

In order to avoid multiple markings, the following principles are given for simplification purposes.

In the event of multiple NF applications, the procedure defined in § 2.3.1 and § 2.3.2 shall apply and the marking shall take the following form:

#### (a) Pipes:

The NF marking takes the following form in event of multiple NF applications:

XXX - 02/02 -  E +  Me - PVC - 100 x 3 - 12 09

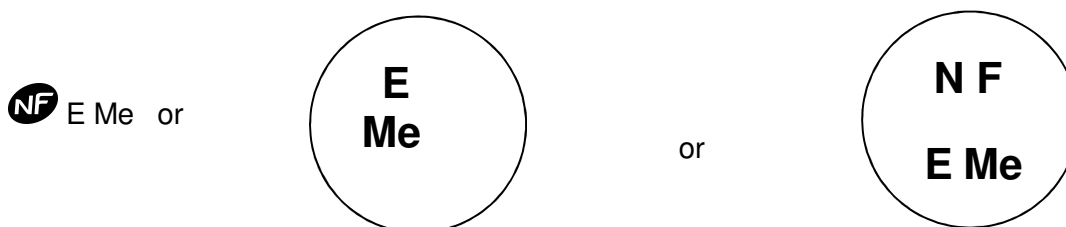
or

XXX - 02/02 -  E +  Me - PVC - 100 x 3 - 12 09

Example of a pipe accepted for the NF Mark - PVC Pipes and Fittings for the Evacuation family (NF055) whose material is covered by the Fire safety NF Mark (NF513).

#### (b) Fittings:

The NF marking takes the following form in the event of multiple NF applications



Example of a fitting authorised to bear both the PVC Pipes and Fittings NF Mark for Evacuation family (NF055) and Fire Safety NF Mark (NF513).





#### (c) Marking of primary packaging (compulsory information):

The following information must be indelibly marked on the primary packaging:

- the company name and/or registered trademark;

- the symbol identifying the material;

-

- either the logo  E and  Me (in colour or black and white) in line with the graphics rules,
- or the logo  E and  Me (in colour or black and white) without the wording "LNE certified" and without the application's name,

## PART 3: OBTAINING CERTIFICATION

### 3.1.1. APPLICATION FOR THE RIGHT TO USE THE NF MARK

The NF Me quality mark applies to a trade name that can cover several production families.

Production family: set of products:

- manufactured according to the same formulation (referenced, in the same LOI range);
- manufactured with a determined structure (compact or structured PVC);
- manufactured with the same process (injection or extrusion);
- coming from a specific production unit;
- subject to a reaction-to-fire classification report of a minimum level of B-s3,d0.

The LOI value obtained on the sample which has undergone the reaction-to-fire classification test must be attached to the application file.

Any change in formulation shall give rise to a new production family. The manufacturer is then required to submit an extension application for product amendment.

Commercial range: set of products manufactured from one or more production families under the same trademark and subject to certification.

### 3.1.2. DOCUMENTS TO BE SUPPLIED

- Standard acceptance application letter (form n°1a) written on the manufacturer's letterhead paper as shown in the enclosed template (with its appendix co-signed and the associated mandate co-signed) (as shown in form no. 1d) for applications from outside the European Economic Area)
- General Information Sheet (Form n°1b),
- List of products for which the NF mark is requested (Form n°1c),
- Description of the quality management provisions put in place:
  - Quality manual and/or plan(s) if possible (if these documents are not distributed outside the site, they must always be made available to the auditor during the audit),
  - Description of the manufacturing process and associated inspection plan (indicating measurements and tests carried out and their frequency),
  - Formalised measures for subcontracting testing where appropriate,
  - Certificate of conformity of the quality management system (where applicable) whose perimeter and scope includes the sites and activities concerned by the NF mark and which are still valid,
  - Certificate of completion of an LOI test training course in an approved laboratory (LNE or laboratory accredited for LOI testing) for operators carrying out this test.
- Technical file:
  - SBI classification report for each production family;
  - The reference LOI value declared by the manufacturer, for each production family;
  - The manufacturer's logo (which is affixed to the products) and/or the commercial names affixed to the products;
  - Copy of the NF055 certificate, where applicable;



- Copy of QB08 certificate (formerly CSTBat RT15), where applicable;
- Product drawing or technical documentation;
- The timetable for bringing product marking into conformity.

**FORM No. 1c**  
**PVC PIPES AND FITTINGS**

REFERENCE OF PRODUCTS PRESENTED FOR ACCEPTANCE

- Trademark:
- Other certifications that the products are subject to (NF055 / QB08)
- Number of production families:
- For each production family, please specify:
  - Density:
  - PVC content:
  - Colour:
  - Fireproofing product if available:
  - Reaction-to-fire classification (SBI):
  - Batch No. and date of manufacturing of the sample which has been subjected to the reaction-to-fire test:
- Description of products (by production family):

Tubes: diameter x thickness or Fittings <sup>(a)</sup> : shape and diameter x side thickness	Formulation reference <sup>(b)</sup>	Declared LOI value	Production site	Laboratory name and SBI Classification Report No. and date

(a) : for fittings, one technical or sales document may be provided if there is a large number of references.

(b) : reference when the application is being made

Applicant's name

Date

Stamp and signature

### **3.2.2. AUDIT**

#### **3.2.2.1. Quality audit**

##### Specific procedures for audit duration:

In the case of ISO 90011 certified companies and/or holders of the NF Mark - Pipes and fittings in rigid unplasticised PVC (NF055) or the QB08 certification - Water distribution or evacuation pipes issued by the CSTB, the duration of the audit is adjusted (reduction of the duration by 1 day).

The audit reports in the framework of the ISO 9001 and/or NF055 or QB08 certification shall be made available to the auditor or consulted on site.

Furthermore, products admitted to the NF055 or QB08 mark are deemed to comply with the product thickness criteria, as mentioned in part 1, §1.1.

#### **3.2.2.2. Samples**

Quantities sampled per product family:

##### - pipes:

3 tubes, each 1 meter long (minimum diameter, maximum diameter and intermediate diameter the most often manufactured);

##### - fittings:

A sufficient number of fittings for performing the tests, chosen from the products subject to the acceptance application (minimum diameter, maximum diameter and intermediate diameter the most often manufactured).

NOTE: the minimum diameter is to be adjusted according to the feasibility of the required tests.

### 3.2.3. TESTS

#### a. LOI tests and cone calorimeter expansion

TESTS	NUMBER OF TESTS	Performance of tests
LOI Test	1 per sample	- during the audit
	1 per sample	- at the Mark laboratory
Expansion test	1 per sample	- at the Mark laboratory

During an expansion test in the cone calorimeter at the trademark's laboratory, the inspection time will be used (cf. § point C1 of §2.2.2.3.c).3.C). In the event of non-conformity of tests with the inspection time, the optimum time shall be used (see § point C2 of §2.2.2.3.c).3.C).

Any additional test (LOI or cone calorimeter expansion test) is subject to an additional charge.

The decision of conformity will be transmitted to the manufacturer at the end of all these tests.

#### b. Inspection of the minimum thickness required for PVC pipes.

In the case of an application for NF 513 certification in conjunction with an application for NF055 or QB08 certification for the same commercial range, the control of the minimum thickness required is not carried out. However, documentary evidence justifying the NF 055 certification application is to be transmitted in the NF 513 certification application file.

In accordance with § 2.1.5. Measurement of the minimum required thickness, the commercial ranges or parts of commercial ranges of PVC pipes not covered by NF055 or QB08 certifications are checked for thickness with the manufacturer's testing means during the on-site audit according to the following provisions:

TESTS	LABORATORY TESTS	NUMBER OF TESTS	ACCEPTANCE
Thickness:	Site laboratory (Manufacturer's means)	3 pipes: 1 pipe of each diameter sampled (minimum, maximum and intermediate diameters)	No out-of- allowance measurements, oversize accepted

If the thicknesses measured in the applicant's laboratory during the admission audit are lower than the minimum requirements, a new application for NF 513 certification will have to be made by the applicant.

## **PART 4: CERTIFIED PRODUCT SURVEILLANCE PROCESS**

### **MODIFICATIONS AND CHANGES**

#### **4.1. CERTIFIED PRODUCT SURVEILLANCE PROCESS**

##### **4.1.1. AUDIT**

###### **4.1.1.1. Quality audit**

In the case of ISO 9001 certified companies <sup>2</sup> and/or holders of the NF mark - Pipes and fittings in rigid non-plasticised PVC (NF055) or the QB08 certification - Water supply or evacuation pipes issued by the CSTB, the verification of quality management provisions is simplified. In this case, the duration of the audit is reduced by 0.5 days. It is therefore 1 day on site.

The audit reports drawn up under the ISO 9001 and/or NF055 or QB08 certification must be made available to the auditor or consulted on-site.

Products accepted to the NF055 or QB08 mark are deemed to conform with the product thickness criteria, as mentioned in part 1 (cf. §1.1).

###### **4.1.1.2. Sampling**

Samples shall be taken in such a way so as to cover the range of products admitted as far as possible.

Samples for testing in the mark laboratory are taken for each product family on samples of pipes and/or fittings.

Every second semester, for each production family, the sampling is carried out on the 100mm diameter or, if necessary, the most commonly manufactured diameter is sampled.

Quantities sampled by product/ production family:

- pipes:

1 one-metre pipe.

- fittings:

Sufficient number of fittings for follow-up testing.

---

<sup>2</sup> The ISO 9001 certifying body must be ISO/IEC 17021 accredited.

NOTE: In the case of a commercial range composed of several production families, a minimum of one family from each group of families to cover all the diameters of the commercial range is taken once a year.

For example:

Commercial range Diameters	Certified families
32 to 75 mm	Families A or B
100mm to 160mm	Families C or D
200mm to 250mm	Families E

Families (A or B), (C or D) and E are taken once a year.

Samples are taken from all available families at each audit.

In the present case, samples can range from 3 to 10 per year.

#### 4.1.2. TESTS CONDUCTED IN THE MARK LABORATORY

##### a. LOI tests and cone calorimeter expansion

The inspections and tests specified below are carried out in the Mark laboratory on the samples taken, and are conducted according to the standardised methods and specifications of the standards stipulated in §2.1. of Part 2, according to the following table:

TESTS	NUMBER OF TESTS	NEXT STEPS
LOI Test	1 test per sample	If LOI result does not conform with the LNE and expansion conforms with the LNE: <ul style="list-style-type: none"> <li>- A second LOI test shall be carried out on the sample taken.</li> <li>- The manufacturer is asked to look for the causes and take corrective action, if appropriate (cf. § LOI variation).</li> <li>- The terms and conditions of the corrective actions will be agreed with the holder, taking into account the recurrence and volume of production impacted.</li> </ul>
Expansion test in the cone calorimeter	1 test per sample	If the result does not conform to the LNE: <ul style="list-style-type: none"> <li>- Temporary blockage of the marketing of the batches concerned,</li> <li>- Determination by the manufacturer of the scope of the batches concerned by the non-conformity and communication to LNE,</li> <li>- The manufacturer is asked to look for the causes and to take the relevant corrective action,</li> <li>- Additional tests (LOI + cone calorimeter expansion) at LNE on a product from another manufacturer within 2 weeks.</li> </ul> Decision by the LNE

During an expansion test in the cone calorimeter at the mark's laboratory, the inspection time will be used (cf. § point C1 of §2.2.2.3.c).3.C). In the case of a test non-conformity obtained with the inspection time, the tests will be carried out at the optimal time (see § point C2 of §2.2.2.3.c).3.C).

The conformity decision will be sent to the manufacturer at the end of all these tests.

Any additional test (LOI or cone calorimeter expansion test) is subject to an additional charge.

##### b. Inspection of the minimum thickness required for PVC pipes.

In accordance with § 2.1.5. Measurement of the minimum required thickness, the commercial ranges or parts of commercial ranges of PVC pipes not covered by NF055 or QB08 certifications are inspected for thickness.

In the case of parts of commercial PVC pipe ranges not covered by NF055 or QB08 certification, the minimum thickness required is inspected if the pipe sampled is not covered by NF055 or QB08 certification.

The provisions are as follows:

TESTS	LABORATORY TESTS	NUMBER OF TESTS	ACCEPTANCE
Thickness:	Site Laboratory (manufacturer's means)	1 pipe (diameter taken for fire tests)	No out-of-allowance measurements, oversize accepted
Thickness:	Mark laboratory	1 pipe of each sample	No out-of-allowance measurements, oversize accepted

In the case of sampling pipes from several production families, a single inspection of the minimum required thickness is carried out on site during the audit. It is carried out on the pipe subjected to fire tests (LOI + expansion).

#### 4.2.3. MODIFICATION OF THE ADMITTED PRODUCT - NEW PRODUCTS

Type of development	Request to be sent to LNE	Examination of the application	Conditions for notification of developments
Extension to a new family production	Application for extension according to forms 1a - 1b - 1c - 1d part 3 with technical file	Audit (which can be adapted or combined with the follow-up audit) with sampling for LOI and expansion tests at LNE.	Certification issued by LNE in light of the results and, where appropriate, after consulting the Committee
Extension to a new product in a certified family	Application for extension according to form 2 part 3	Examination on a case-by-case basis with the possibility of testing	Certification issued by LNE in light of the results and, where appropriate, after consulting the Committee
New commercial reference for a model already approved for the NF mark	Request for maintenance according to form 3 part 3	On file	Certification issued by LNE, (without consulting the Committee, if no particular problem)



## **TECHNICAL DOCUMENT N°2**

### **CERTIFICATION RULES**

#### **NF MARK - FIRE SAFETY PVC PIPES AND FITTINGS- COATED TEXTILE SUPPORTS**



#### **GROUP: COATED TEXTILE SUPPORTS**

#### **SUMMARY: SPECIAL REQUIREMENTS RELATING TO**

#### **PART 2: REQUIREMENTS TO BE MET BY THE APPLICANT/HOLDER**

#### **PART 3: OBTAINING CERTIFICATION**

#### **PART 4: CERTIFIED PRODUCT SURVEILLANCE PROCESS MODIFICATIONS AND CHANGES**

Rev. 4- November 2019

## **PART 2: REQUIREMENTS TO BE MET BY THE APPLICANT/HOLDER**

### **2.1. REQUIREMENTS CONCERNING PRODUCTS**

#### **2.1.1. REFERENCE STANDARDS**

**NF P 92-503** (December 1995) - Building materials – Reaction to fire tests.  
Electric burner test used for flexible materials (up to 5 mm thick).

**NF P 92-507** (September 1997) - Building – Interior fitting materials.

#### **2.1.2. ADDITIONAL SPECIFICATIONS OF COATED TEXTILE SUPPORTS**

For coated textile supports, admission to the NF Mark is based on compliance with the specifications used to establish the M2 classification.

The samples tested must comply with the specifications defined in the following table:

<b>Features Test methods</b>	<b>Specifications</b>
Electric burner test NF P 92-503	The length destroyed during the test shall be less than 35 cm for M2 classification

### **2.2. REQUIREMENTS CONCERNING THE QUALITY MANAGEMENT SYSTEM**

#### **2.2.2. SPECIFIC QUALITY REQUIREMENTS**

##### **2.2.2.1. Inspections and tests**

The control plan must include at least the following tests and inspections:

##### **a) Inspection on reception (raw materials):**

The manufacturer must ensure that the raw materials delivered (PVC and flame retardants in particular) comply with the purchasing specifications, and establish the corresponding procedure.

##### **b) In-process inspection**

Determination:

- of the weight per unit area.
- of the gelation rate.
- of tear resistance.
- of the coated/support adhesion.

##### **c) Final inspection**

The manufacturer shall be equipped with an electric burner for the final inspection.

An electric burner test (standard NF P 92-503) shall be carried out on at least each fraction of 2400 ml of production.

Each test specimen shall be in the shape of a 600 mm x 180 mm rectangle.

There are 4 test specimens per sample: 2 in each direction (lengthways and crossways), 2 on each side.

If the length destroyed during the test is less than 35 cm, the test is satisfactory.

If the length destroyed during the test is more than 35 cm, the test is not satisfactory and another test shall be carried out. In the event of further unsatisfactory results, the corresponding production batch is downgraded.

#### **2.2.2.2. Provisions to be taken in the event of a change in the nature of the components (new formulation)**

Any change in the chemical nature of the components must be reported by the manufacturer to LNE. This change calls into question the maintenance of the formulation and may result in particular in a change in the fire performance of the product requiring the product to be considered as a new product and must be subject to an extension application for modification.

NOTE: A change of supplier does not in itself constitute a change of formula.

#### **2.2.2.3. Checks and/or calibration, and maintenance of test and measuring inspection equipment**

In the context of group 2, the equipment must be maintained, checked and/or calibrated regularly:

- Electric burner:  
Adjustment of the electric burner every 3 years.

### **2.3. REQUIREMENTS CONCERNING MARKING**

#### **2.3.1 PRODUCT MARKING**



##### **2.3.1.1. MARKING OF COATED TEXTILE SUPPORTS**

Each NF-certified coated textile support must be indelibly, permanently visibly and durably marked. For example, this marking can be done by engraving.

The NF logo conforming to the graphic rules and in accordance with the specific standards and regulations in force, is as follows:



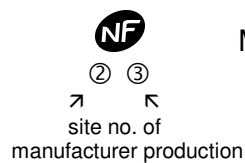
Marking must be carried out at least every 1.20 m and at least 5 cm from the edge and must include:

- ① the manufacturer's trademark.
- ② the manufacturer's identification number if this trademark is different from the latter's (logo registered at LNE).
- ③ the NF monogram. Holders may use:
  - either the new logo (in colour  or black and white) in line with the graphics rules,
  - or the new logo (in colour  or black and white) without the wording "certified by LNE" or the name of the application,
- ④ reaction to fire rating

For example:

TRADEMARK OR LOGO 10/1

①



M 2

15 - 02

④

⑤

## **PART 3: OBTAINING THE CERTIFICATION**

### **3.1. APPLICATION FILE CREATION**

#### **3.1.1. APPLICATION FOR THE RIGHT TO USE THE NF MARK**

A coated textile support is a product defined by:

- its support.
- the formulation of its coating.
- the type of sound coating (single-sided or double-sided).
- its thickness.
- its weight per unit area.
- its colours.
- its classification.
- its production unit.

Any change in one of its parameters creates a new product.

For each coated textile support intended for classification, the manufacturer must have a classification report.

#### **3.1.2. REQUIRED DOCUMENTS**

- Standard letter of application for certification (forms n°1a) reproduced on the manufacturer's letterhead, drawn up according to the attached model (with its appendix co-signed and the associated mandate co-signed (according to the example of form n°1d) in the case of applications located outside the European Economic Area)
- General Information Sheet (Form n°1b),
- List of products for which the NF mark is requested (Form n°1e),
- Description of the quality management measures put in place:
  - Quality manual and/or plan(s) if possible (if these documents are not distributed outside the site, they must always be made available to the auditor during the audit),
  - Description of the manufacturing process and associated inspection plan (indicating measurements and tests carried out and their frequency),
  - Formalised measures for subcontracting testing where appropriate,
  - Certificate of conformity of the quality management system (where applicable) whose perimeter and scope includes the sites and activities concerned by the NF mark and which are still valid,

Technical file:

- The manufacturer's logo (which is affixed to the products) and/or the commercial names affixed to the products;
- Product drawing or technical documentation.
- sales catalogue of manufactured products, method(s) of distribution.

**FORM No. 1**  
**COATED TEXTILE SUPPORTS**  
**REFERENCE OF THE PRODUCTS FOR WHICH CERTIFICATION IS REQUESTED**

Trademarks:

Other product certifications:

Number of production families

Indicate, for each production family:

Type and quality:

Presentation:

Colour:

Material characteristics:

✓ Description of the support

Nature, composition:

Thread count:

Mass per m<sup>2</sup>:                      Tolerance:

✓ Description of the coating

Identification of the formula (number, date of issue, etc.) :

Essential components:

- nature of flame retardants and quantities in %:

- nature of plasticisers and quantities in %:

Mass per m<sup>2</sup>:                      Tolerance:

✓ Description of the coated textile support

Single-sided coating:

Double-sided coating:

Thickness:                      Tolerance:

Total mass per m<sup>2</sup>:                      Tolerance:

Surface aspect(s):

Existence of finishing varnish:

if so, nature:

Colours (attach palette):

✓ Reaction-to-fire classification report:

Reaction-to-fire classification obtained with the application conditions specified on this sheet:

Classification report number:

Issued by:

on (date):

Batch No. and date of manufacturing of the sample which has been subjected to the reaction-to-fire test:

Applicant's name

Date

Stamp and signature

## **3.2. INITIAL ASSESSMENT PROCESS**

### **3.2.2.2. Sampling**

Quantities taken by product family: 2 linear metres of product.

### **3.2.3. TESTS**

Electric burner tests are conducted on each product family.

First, a radiation test is carried out on the product as follows:

- Chain place,
- Backwards chain,
- Weaving marl place,
- Backwards weaving marl.

Then, on the type of sample giving the worst result, 3 additional tests are performed.

The average of the four destroyed or charred tests measured from the lower edge of the test specimens shall be less than 35 cm.

## PART 4: CERTIFIED PRODUCT SURVEILLANCE PROCESS

### MODIFICATIONS AND CHANGES

#### 4.1. CERTIFIED PRODUCT SURVEILLANCE PROCESS

##### 4.1.1.2. Sampling

Sampling for mark laboratory testing is carried out for each product family on samples of coated textile supports.

Two linear metres are taken from each product family.

##### 4.1.2. TESTS CONDUCTED IN THE MARK LABORATORY

TESTS	NUMBER OF TESTS	NEXT STEPS
Electric burner test	1 test per sample	If the result does not conform: - The manufacturer is asked to look for the causes and take corrective action, - Perform an additional electric burner test at LNE on an additional sample to be sent by the holder.

In follow-up, the electric burner test consists of 4 tests:

- Chain place,
- Backwards chain,
- Weaving marl place,
- Backwards weaving marl.

##### 4.2.3. MODIFICATION OF THE ACCEPTED PRODUCT - NEW PRODUCTS

Arrangements for examining the application and conditions for notifying developments:

Type of development	Request to be sent to LNE	Examination of the application	Conditions for notification of developments
Extension to a new family	Application for extension according to forms 1a - 1b - 1d - 1e part 3 with technical file	Audit (which can be adapted or combined with the follow-up audit) with sampling for electric burner tests at LNE.	Certification issued by LNE in light of the results and, where appropriate, after consulting the Committee
New commercial reference for a model already approved for the NF mark	Request for maintenance according to form 3 part 3	On file	Certification issued by LNE, (without consulting the Committee, if no particular problem)



## **CERTIFICATION RULES**

### **NF MARK - FIRE SAFETY PVC PIPES & FITTINGS – COATED TEXTILE SUPPORTS**



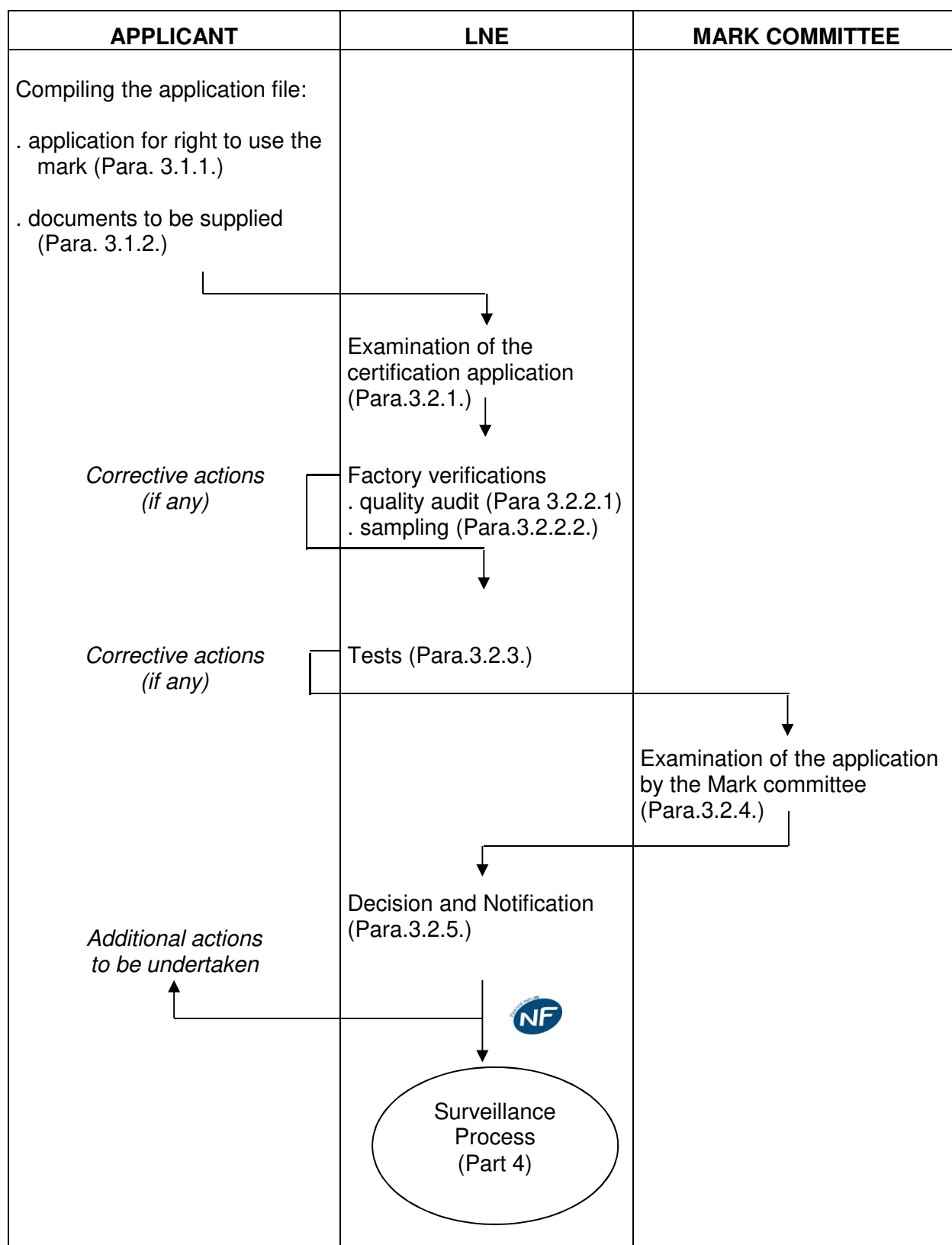
## **PART 3 OBTAINING CERTIFICATION**

### **CONTENTS**

- 3.1. Documents required for the application file**
- 3.2. Initial assessment process**

Rev. 4 – November 2019

### PROCESS FOR OBTAINING CERTIFICATION



Before making the application, the applicant must be sure to meet, at the time of the application, the conditions defined in these Certification Rules, especially those in Part 2, regarding his product and sites in question.

He must undertake to comply with said conditions throughout the period of using the NF mark.

If he fails to respect these rules, the applicant/holder exposes himself to the interruption or suspension of the processing of his file. Notably, it is not possible in any circumstances to make reference to the NF mark before obtaining the right to use the NF mark, or to present forged products for certification.

### **3.1. COMPILING THE APPLICATION FILE**

Any company manufacturing one or more products covered by this application of the NF mark can request the right to use the mark. Such request is known in this document as an "application" and the person formulating it as the "applicant".

#### **3.1.1. APPLICATION FOR THE RIGHT TO USE THE NF MARK**

Any manufacturer who wishes to apply for NF certification for a product they have manufactured must first read carefully the certification rules for the Mark and declare his acceptance of them.

The application is drawn up on the manufacturer's letterhead paper as shown in the template (form no. 1a) and must be sent to LNE.

It must specify the families presented for acceptance.

For each group of products, the definition of a production family is detailed in the associated Technical Documents.

The applicant undertakes to back his application up with a file containing, for each factory that manufactures the products for which the certification of the mark is being sought, the documents or information specified in Para. 3.1.2. below.

The application may only be accepted if the inspections stipulated in Part 2 of these certification rules have been set up and tested beforehand by the manufacturer. This control is verified particularly during the acceptance audit.

All the documents must be written in French or English.

The application must be accompanied by full payment of the corresponding fees determined at the processing of the file and the initial audit.

When the applicant is from a country outside the European Economic Area, they must submit their application jointly with a representative who is established in the European Economic Area. The representative shall be duly accredited and responsible for the production of goods for which the NF mark is requested and which are to be sold in France.

The representative is hereinafter known as the "agent".

Prior to affixing the NF Mark, any modification made to the range defined for acceptance must be pointed out to LNE which will decide whether or not additional tests need to be carried out.

### **3.1.2. REQUIRED DOCUMENTS**

For each product group, the documents to be provided are detailed in each associated technical document.

All documents must be written in English or French.

### **3.1.3. APPLICATION FOR EXTENSION OF CERTIFICATION**

Documents to be drawn up and sent to LNE:

- standard application letter (forms 1a, 1b or form 2 depending on the type of extension);
- product information sheet (form 1c);
- updated quality plan if the requested extension has led to a modification of the quality plan;
- for PVC pipes and fittings: SBI classification report if the request concerns a new production family;
- for coated textile supports: test report with electric burner if the application concerns a new production family.

### **3.1.4. APPLICATION FOR MAINTENANCE OF THE RIGHT TO USE**

Documents to draw up and send to LNE:

- standard application letter (form no. 3).

**FORM No. 1a**

**CERTIFICATION APPLICATION**

(to be drawn up on the manufacturer's headed paper)

Monsieur le Directeur Général du  
LABORATOIRE NATIONAL DE  
METROLOGIE ET D'ESSAIS  
Pôle Certification Environnement Sécurité  
et Performance  
1, rue Gaston Boissier  
75724 PARIS Cedex 15 - France

**PURPOSE:** Application for the right to use the NF Mark - Fire Safety - PVC Pipes & Fittings - Coated Textile Supports

Dear Sir,

I the undersigned (name and position) .....  
representing the company (identification of the company - head office).....  
request LNE to carry out the verifications required for obtaining the right to use the NF Mark  
for the products specified in the enclosed table, conform to the NF XXX standard.

These products are manufactured in the factory of (company identification and full address of  
the factory) .....

Option in case of modification of a certified product:

The products made in my factory, differ from the NF certified product through the  
following modifications: (*description of modifications*).

This product replaces the certified product: .....

This new product made by my factory is identified under the following references: .....

I hereby declare that the other features of the products concerned by this application are  
in strict conformity to the product that is already NF certified and manufactured in the  
same conditions.

Option in case of maintenance application:

This application also relates to products sold by ..... under the references (see attached  
maintenance application).

I declare that I am familiar with the reference standards, the General Rules of the NF Mark  
and the Certification rules NF Fire Safety – PVC Pipes and Fittings - Coated Textile Supports  
and I undertake to comply therewith throughout the period of use of the NF Mark.

I attest that these products satisfy the regulatory requirements applicable to them and I  
undertake not to present forged products for certification.

Date  
Stamp and signature  
of the applicant

## APPENDIX TO THE CERTIFICATION APPLICATION (1)

Furthermore, I authorise the company (2).....  
represented by Mr (name and capacity) . .....

who accepts the terms of the attached mandate, to act on my behalf on the French territory  
for all matters relating to the use of the NF Mark.

Option: For such purposes, I ask that the fees incumbent on me be invoiced directly to him.  
He hereby undertakes to settle the invoices on receipt.

I undertake to notify LNE immediately if I appoint a new agent to replace the agent named  
above.

Yours faithfully,

Date  
Stamp and signature  
of the agent's representative (3)

Stamp and signature  
of the applicant's representative (3)

- 
- (1) This appendix is only to be completed by applicants located outside the European Economic Area. It must be accompanied by a co-signed mandate (see example form 1d).  
(2) The designation of the representing company must include: company name, legal form, head-office and Companies Register number.  
(3) The signatures of the applicant and his agent must be preceded respectively by the hand-written words "Proxy agreed" and "Acceptance of proxy agreed".

**FORM No. 1b**  
**GENERAL INFORMATION SHEET**

**Applicant Company Name:**

Applicant address:

Contact:

Telephone:

Email:

Company website or of the website(s) concerned by the e-mail request:

Site ISO 9001 certified: Yes ☐ No ☐

**Contact details of the correspondent(s) for receiving LNE test and audit reports by e-mail:**

Name of the contact person	Position	e-mail	Audit report	Test report

**Invoicing address** (if different from the address given in the applicant's business name), with commitment if different from the applicant

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**Location of the different stages of manufacturing**

	Contact details of the site responsible for each stage*	Number of employees at the site concerned by the certification	Site surface area
<b>Design</b>			
<b>Manufacturing (1)</b>			
<b>Assembly</b>			
<b>Final Check</b>			
<b>Marking</b>			
<b>Packaging</b>			
<b>Storage</b>			

Any aspect not carried out by the applicant is subject to a contract defining the responsibilities with its provider

(1) detail is necessary the manufacturing steps or external manufacturing

Trademark:

Owner of the trademark\*:

Issued at:

on:

Signature

\* Indicate the company name, address, contact person, phone number and e-mail address if different from the applicant.



**FORM no. 1d**  
**EXAMPLE OF A MANDATE**

(to be drawn up on the applicant/agent's letterhead paper)

**List of information to be supplied:**

- Corporate name: \_\_\_\_\_
- Address: \_\_\_\_\_
- Country: \_\_\_\_\_
- Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_
- SIRET No.: \_\_\_\_\_ NAF code: \_\_\_\_\_
- Name and profession of the legal representative: \_\_\_\_\_
- Name and profession of the correspondent (if different): \_\_\_\_\_
- VAT ID number: \_\_\_\_\_
- Email address of contact person: \_\_\_\_\_
- Email address of the Company: \_\_\_\_\_
- Website: \_\_\_\_\_

**Identification of the roles of the authorised agent to be included in the mandate between applicant/holder and agent**

Applicant/Holder:

.....

Authorised agent:.....

**Minimum requirements which must be shown in the mandate:**

- assignments and associated responsibilities
- financial aspects (invoicing relating to the NF mark)
- complaints
- certifying body contact

**Mandate:**

The mandate should be mentioned in the applicant/holder's quality system.

A copy of the mandate in French or English should be attached to the co-signed certification's application.

Compliance with the mandate arrangements is checked during audits.

Date of the initial mandate

Signatures of the representative of the agent and the applicant

**FORM No. 2**

**NF MARK - FIRE SAFETY  
PVC PIPES & FITTINGS – COATED TEXTILE SUPPORTS**

**EXTENSION OF CERTIFICATION APPLICATION FORM  
(WITHOUT A CHANGE IN COMMERCIAL REFERENCE)**

(to be prepared on the requesting manufacturer's letterhead or to be completed with the company stamp and signature of the company's legal representative).

Monsieur le Directeur Général du  
LABORATOIRE NATIONAL DE  
METROLOGIE ET D'ESSAIS  
Pôle Certification Environnement Sécurité  
et Performance  
1, rue Gaston Boissier  
75724 PARIS Cedex 15 - France

Purpose: Application to extend certification NF Mark – Fire Safety – PVC Pipes & Fittings - Coated Textile Supports

Dear Sir,

I wish to apply, as .....(1), representing the company .....(2), to maintain the right to use the NF mark for products named below (3):

These products are manufactured in the factory:  
(full address of the factory)

These products will replace the products that are currently certified: YES  
NO

I declare that I am familiar with the reference standard, the General Rules of the NF Mark and the Certification rules and I undertake to comply therewith throughout the period of use of the NF Mark.

-----  
(1) Position.

(2) Identification of the company (head office).

(3) Mention the commercial reference, diameter, thicknesses and shapes.

(1) Furthermore, I appoint the company ..... (2) represented by Mr..... (name, function) to represent me on the territory of the European economic area with regard to any question concerning the use of the NF Mark. With regard to this, I request that all expenses at my charge be invoiced directly to him. He will settle my account on my behalf, as agent, as soon as the invoices are received, this being part of his undertaking in accepting this appointment.

I undertake to immediately report to the Mandated Body any new appointment of agent replacing the person appointed above.

Yours faithfully,

Stamp and signature  
of the representative (3)

Date  
Stamp and signature  
of the applicant(3)

Encl.: Technical file (see below).  
payment

- 
- (1) This paragraph is only required for applicants located outside the territory of the European Economic Area.
- (2) The designation of the agent company comprises: company name, legal form, head-office and Companies Register number.
- (3) The signatures of the applicant and his representative in France must be preceded by the written indication "Proxy agreed" and "Acceptance of proxy agreed".

**FORM No. 3**

**FIRE SAFETY NF MARK  
PVC PIPES & FITTINGS – COATED TEXTILE SUPPORTS**

**APPLICATION FORM FOR MAINTENANCE OF THE RIGHT TO USE THE NF MARK  
(WHEN MODIFYING A COMMERCIAL REFERENCE)**

(to be prepared on the manufacturer's letterhead and to be signed by the distributor)

Monsieur le Directeur Général du  
LABORATOIRE NATIONAL DE  
METROLOGIE ET D'ESSAIS  
Pôle Certification Environnement Sécurité  
et Performance  
1, rue Gaston Boissier  
75724 PARIS Cedex 15 - France

Purpose: Application to maintain the right to use the NF Mark - Fire Safety – PVC Pipes & Fittings - Coated Textile Supports

Dear Sir,

I wish to apply, as .....(1), representing the company .....(2), to maintain the right to use the NF mark for products named below (3), in accordance with the certification rules NF FIRE SAFETY – PVC PIPES AND FITTINGS – COATED TEXTILE SUPPORTS:

which differ from the products approved for the NF Mark only by the commercial reference and trademark.

This application concerns the products marketed through:  
under the trademark:

Approval reference for basic model		Trademark(s) and commercial reference(s) required by the distributor or new trademark(s) and commercial reference(s) required by the holder
Trademark and commercial reference already admitted	No. of the Right to Use the NF Mark already admitted	

-----  
(1) Position.

(2) Identification of the company (head office).

(3) Mention commercial reference.

The commitment from the above mentioned distributor is attached (see Appendix).

Stamp and signature of Holder  
or of authorised representative (\*):

Date

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- (1) Position
- (2) Identification of the company (head office)
- (3) Distributor's name and address
- (\*) Concerns a manufacturer outside the European economic area

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**APPENDIX FORM NO. 3**

**ATTACHMENT WITH APPLICATION FOR MAINTENANCE OF THE RIGHT  
TO USE THE NF MARK**

(Distributor's undertaking to be written on the distributor's letterhead paper)

I the undersigned, \_\_\_\_\_

acting as \_\_\_\_\_

of the company: \_\_\_\_\_

acknowledge that the substitution of the trade name \_\_\_\_\_ for that of the manufacturer of the .... of the above mentioned models leads me to accept the relevant responsibilities.

In particular, I declare that I hold an exclusive right to use these trademarks and references, having registered them in compliance with industrial property legislation in force,

and I agree to market the abovementioned model(s) for which this application is made without making any change of any type whatsoever.

Done at \_\_\_\_\_ on \_\_\_\_\_

Signature \_\_\_\_\_

Distributor's stamp: \_\_\_\_\_

Stamp and signature of producer  
or authorised representative: \_\_\_\_\_

## **3.2. INITIAL ASSESSMENT PROCESS**

### **3.2.1. EXAMINATION OF THE CERTIFICATION APPLICATION**

The application and enclosed file sent to LNE are examined before factory verifications and tests are carried out.

Upon receiving the application, LNE checks that:

- all the requested documents are enclosed in the application file according to Para. 3.1.2;
- the elements in the file comply with the requirements of the certification rules;
- The fees have been paid.

LNE checks that it has all the means for responding to the application and may request additional information required for the admissibility of the file when this is incomplete.

Once the application is admissible, LNE organises the inspections, and informs the applicant about the organisation methods (auditor, duration of the audit, audited sites, laboratories, sampled products, etc.) and, if applicable, the due date for the additional items.

The checks carried out in connection with the NF mark are as follows:

- audits so as to be able to cover the various participants in the design, manufacture, assembly, quality control, marking and packaging of the products (see Para. 3.2.2);
- tests on the products (see 3.2.3),

The test samples are taken during the initial audit and sent by the applicant to the mark laboratory.

### **3.2.2. AUDIT**

Examination of the application includes an initial audit of the factory where the products presented for acceptance are manufactured. It also includes, if applicable, an audit of the various sites participating and described in the certification application, on the basis of the same standard.

It is conducted by auditors qualified by LNE who have given an undertaking to observe professional secrecy.

The language of the audit is French or English. If this is not the case, it is up to the company being audited to make available an interpreter to the auditor. In this case the duration of the audit may be increased (prior agreement with the company).

The NF auditor must have at his disposal all the resources necessary (documents, premises, installations, facilities) to perform his assignment, including competent people to carry it out.

#### **3.2.2.1. Quality audit**

This audit is conducted according to the general principles defined in standard ISO 19011 for conducting a quality audit. In particular, the scope of the audit and details of the procedure are specified in an audit plan sent to the company before the audit.

The auditor(s):

- Conduct(s) a quality audit with the purpose of verifying the existence and effective implementation of the quality management system set up by the manufacturer and its conformity with the quality requirements in Part 2 of these certification rules.
- Check(s) that the products are covered by the scope (see Part 1 Para 1.1).
- Check(s) that the verifications required in Part 2 have been carried out and tested beforehand by the manufacturer in order to verify the application of frequencies, operating procedures and criteria defined by NF certification rules and ensure(s) that compliance testing on products covered by the certification application is conducted in their presence. It is preferable to carry out these tests on the model sampled for tests in the mark laboratory.

NOTE: test results obtained during the audit do not prejudice results obtained by the mark laboratory.

- Take(s) the samples required for the acceptance tests.

The duration of the on-site audit is 3 days. The duration of the audit can be adapted according to the sites to be audited, particularly in the event of subcontracting or outsourcing activities (prior agreement from the applicant).

With the company's agreement, the auditors can take a copy of any document they consider necessary.

In the event of companies that are ISO 9001 (2015)<sup>1</sup> certified, the audit duration is altered (reduced by 1 day). Equally, in the case of the group Pipes and Fittings PVC, specific modalities concerning the audit duration could be applied.

The duration of the audit can be adapted according to the sites to be audited, particularly in the event of subcontracting or outsourcing activities and the number of products to be audited (prior agreement from the applicant).

Once the audit has been completed, the audit leader will write up a report, which shall be provided to the applicant during the closing meeting. It will discuss the efficacy of the quality system in place, its strengths and weaknesses and give an explicit statement of non-conformities. It will also contain a report detailing the tests carried out during the audit, and the sample sheet.

If one or more non-compliant points have been noted, the applicant completes the headings of the non-compliance sheets and sends them within the time agreed with the lead auditor to the latter for assessment.

The complete report is sent by LNE by email to the correspondent(s) appointed by the applicant, with, if applicable, a copy to the agent.

<sup>1</sup> 1: the applicant's ISO 9001 certificate includes, within its perimeter and in its field, the sites and activities concerned by the certification mark; and this is issued by a certification body accredited by COFRAC or by a member of EA (European cooperation for Accreditation) or by a member of the IAF (International Accreditation Forum) - see signatories on the COFRAC website: [www.cofrac.fr](http://www.cofrac.fr).



### **3.2.2.2. Sampling**

The manufacturer must make available to the lead auditor products that are representative of each production family subject to the certification application necessary for sampling.

Auditors collect the samples needed for testing that have been validated by the manufacturer's inspection plan.

Sampling for mark laboratory testing is carried out on samples for each product family subject to the application.

For each product group, the samples to be taken are detailed in the associated technical documents.

A sampling sheet is drawn up.

The samples taken are marked by the auditors with a distinctive sign used to authenticate them later, and must be accompanied by information allowing the samples taken to be identified.

The samples taken are sent within 15 days by/and under the responsibility of the applicant to the mark laboratory (see Part 5 herein) tasked with performing the tests, together with the sampling sheet, unless the auditor(s) decide(s) to see to this.

### **3.2.3. TESTS**

The tests to be carried out by the mark's laboratory on the products taken during the audit are defined in the technical documents associated with each product group.

In the event of non-compliance, LNE shall keep the applicant informed of the action to be taken.

The tests shall be the subject of a test report which shall be sent by LNE via e-mail to the correspondent(s) appointed by the applicant, with a copy to the authorised representative where appropriate.

In the event of non-conformity, the manufacturer shall inform LNE of its analysis of the causes and the corrective actions taken, specifying the associated time limit.

### **3.2.4. EXAMINATION OF THE APPLICATION BY THE MARK COMMITTEE**

LNE conducts an assessment of the evidence and, if appropriate, conducts additional checks prior to presentation to the Mark Committee.

A summary of the audit observations and test results is presented, in anonymous form, to the Mark Committee.

The layout of this summary must clearly highlight any point where the products, or the inspections implemented by the manufacturer, do not comply strictly with the requirements defined in Part 2 of these Certification Rules.

After examining the various documents in the file, the Mark committee proposes to award or refuse the certification.

### **3.2.5. DECISION AND NOTIFICATION**

On the basis of the results obtained during examination of the application and the recommendations of the mark committee, LNE notifies the applicant of one of the following decisions:

a) Certification agreed.

This decision may be accompanied by suspensive conditions which define the conditions to be met by the applicant before the certificate is awarded.

b) Certification refused.

The certification decision should occur at the latest one year after the initial audit.

In virtue of the certification decision notified by LNE, AFNOR Certification grants the right to use the NF mark.

If the right to use the NF Mark is awarded, the beneficiary is known as the "holder". Maintaining this right is subject to the results of the verifications defined in Part 4.

The exercise of the right to use the NF Mark is strictly limited to the products for which it was granted, i.e. the duly defined products from the duly defined plants, and manufactured under the conditions set out in these Certification rules.

### **3.2.6. APPEAL AGAINST A DECISION**

The applicant may appeal against the decision taken. The procedure is set out in Article 11 of the General Rules of the NF Mark. This appeal should be made by recorded delivery letter with acknowledgement of receipt within 15 working days.

LNE firstly proceeds with the re-examination of the file in view of the factors justifying this challenge. It notifies confirmation of the decision or the new decision to the applicant within 30 working days.

Should the applicant wish to maintain its challenge, an appeal may be made by the applicant or certification beneficiary against the decision of LNE.

Explanations for this appeal, which does not have a suspensive effect, must be given. It is lodged by sending a recorded delivery letter within 15 working days.

It is examined by LNE within 30 days of receipt and, if it concerns the certification decision or specific certification rules, gives rise to an examination by the Mark committee. LNE informs the plaintiff, within this time limit, as to whether or not it maintains its decision.

If the appeal is maintained after processing and submission to the mark committee for their opinion, the appeal is presented to the Certification and Impartiality Preservation Committee of LNE, which proposes its conclusions after examination.

This last appeal is subject to a lump-sum payment by the applicant.

The final decision is notified to the Company by LNE.

## **CERTIFICATION RULES**

### **NF MARK - FIRE SAFETY PVC PIPES & FITTINGS - COATED TEXTILE SUPPORTS**

#### **PART 4**

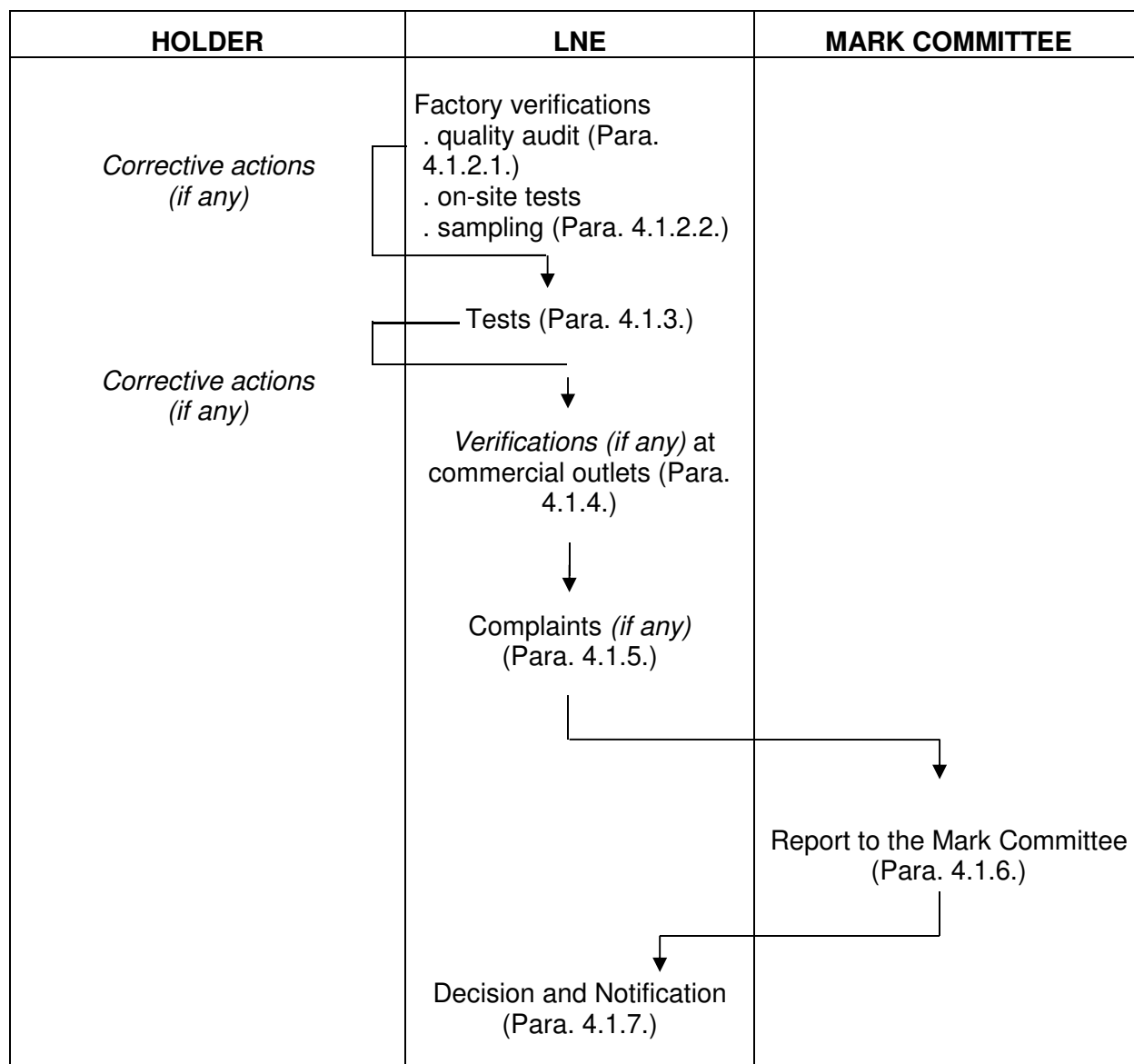
### **CERTIFIED PRODUCT SURVEILLANCE PROCESS MODIFICATIONS AND CHANGES**

#### **CONTENTS**

- 4.1. Certified product surveillance process**
- 4.2 Modification and changes to company organisation or the certified product**

Rev. 4 - November 2019

## SURVEILLANCE PROCESS



Throughout the duration of the certification, the holder must:

- comply with the requirements defined and the marking methods described in Part 2,
- systematically inform LNE of any change in the specifications of the certified product, and/or organisation that may have an impact on the certification:
  - modifications concerning the holder (Para. 4.2.1.)
  - transfer of production site (Para. 4.2.2.)
  - modification of the accepted product, new products (Para. 4.2.3.)
  - Temporary stoppage of production (Para. 4.2.4.)
  - definitive stoppage of production or waiver of the right to use the NF Mark (Para. 4.2.5.)

In addition, LNE reserves the right to carry out any checks it deems necessary following:

- a modification concerning the certified product or the quality organisation of the various intervening sites and described in the original certification application file,
- complaints, challenges, disputes of which it has been informed and relating to the use of the NF Mark.

## **4.1. CERTIFIED PRODUCT SURVEILLANCE PROCESS**

LNE organises surveillance of certified products.

The first follow-up audit occurs no later than six months after the certification decision.

The purpose of this surveillance is to monitor compliance by the manufacturer with the requirements of these certification rules.

The surveillance methods depend on the decisions made as a result of previous inspections.

### **4.1.1. AUDIT**

At least two audits are conducted per year at the main production site and at the site in charge of final inspection of certified products.

LNE defines, on a case-by-case basis, which sites are to be audited in addition and the associated frequency among different intervening sites and described in the original certification application.

The duration of the audit can be adapted particularly on the basis of the sites to be audited, as per the requirements of Para. 3.2.1 (the holder must agree beforehand).

The examinations carried out concern primarily any modifications made since the previous audit that affect manufacturing, inspection methods or organisation of the quality management system.

This quality audit is conducted according to the general principles defined in standard ISO 19011 for conducting a quality audit. In particular, the scope of the audit and details of the procedure are specified in an audit plan sent to the company before the audit.

During each audit, products are sampled for laboratory testing of the mark (see Para. 4.1.2.2.).

During the audit, the auditor has conformity tests carried out in his presence on accepted products, in order to verify the conditions under which inspections are performed by the manufacturer. It is preferable to carry out these tests on the type sampled for tests in the Mark laboratory.

NOTE: test results obtained during the audit do not prejudge results obtained by the mark laboratory.

Finally, additional audits can be carried out on the proposal of the Mark committee or on the initiative of LNE.

With the manufacturer's agreement, the auditor can take a copy of any document he considers necessary.

#### **4.1.1.1. Quality audit**

Verification of quality management measures must include, at every audit, verification of compliance with the general requirements applicable and the specific requirements of the NF Mark (Para. 2.2.2, Part 2), through processes defined by the manufacturer:

The duration of the on-site audit is 1.5 days.

The duration of the audit may be adapted according to the sites and the number of families to be audited, particularly in the event of subcontracting or outsourcing of activities (prior agreement from the applicant).

##### In the case of companies subject to quality management system certification:

In the case of ISO 9001 (2015) certified companies<sup>1</sup>, the verification of quality management provisions is simplified. In this case, the duration of the audit is reduced by 0.5 days. It is therefore 1 day on site.

The conformity of the quality management system is subject to ISO 9001:2015 certification, the scope of which includes the sites and activities concerned by the NF mark and is currently valid.

This certification is issued by an accredited body according to ISO/IEC 17021 by COFRAC or, failing this, by a member of EA (European cooperation for Accreditation) or by a member body of an association that is a signatory to international recognition agreements whose signatories are identified on the COFRAC website ([www.cofrac.fr](http://www.cofrac.fr)).

The audit reports of the quality management system certification body shall be made available to the auditor or consulted on site.

Also, in the case of the PVC Pipes and Fittings group, specific arrangements may be applied during the audit.

---

<sup>1</sup> The ISO 9001 certifying body must be ISO/IEC 17021 accredited.

Audit report:

The lead auditor shall draw up an audit report which he/she shall give to the holder at the end of the closing meeting, specifying in particular the effectiveness of the quality system set up, the strong points, the areas for improvement and an explicit statement of non-conformities. It also includes the report of the tests carried out during the audit and the sampling sheet.

Where non-conformity(ies) has (have) been identified, the holder shall complete the various headings of the non-conformity sheets and send them within the period agreed with the lead auditor to the lead auditor for assessment.

The full report shall be sent by LNE via e-mail to the correspondent(s) appointed by the holder, with a copy to the authorised representative if necessary.

**4.1.1.2. Sampling**

The auditors shall take the samples required for the tests and which have been validated according to the manufacturer's control plan.

The samples to be taken for each product group are detailed in the associated Technical Documents.

A sampling sheet is drawn up.

The samples taken must be accompanied by information enabling the batch to be identified. They shall be marked by the auditor with a distinctive sign enabling them to be authenticated at a later date and shall be sent within a period of less than 15 days by/and under the responsibility of the manufacturer to the trademark laboratory responsible for carrying out the tests, accompanied by the sampling sheet, unless the auditor decides to take them over.

Samples for testing may be taken from stock, from production on the day of the audit or from samples kept in the manufacturer's laboratory.



#### **4.1.2. TESTS AT THE MARK LABORATORY**

The tests to be carried out within the framework of the certification follow-up and the test procedures as well as the data follow-up are detailed in the associated Technical Documents.

LNE shall send the correspondent(s) appointed by the holder a report of the tests carried out on samples via e-mail, with a copy to the authorised representative if necessary.

##### **IMPORTANT NOTE:**

In the event of non-conforming results detected by LNE, the manufacturer must apply the provisions of Part 2 § 2.2.1. (Control of non-conforming items) for the information of its customers and product recalls.

The holder shall inform LNE of any corrective action taken as a result of the non-conformities found.

#### **4.1.3. VERIFICATIONS AT COMMERCIAL OUTLETS**

In addition to the previous measures, LNE may request verifications to be carried out in the distribution circuit. The results are sent to the holder concerned.

In addition to the measures above, inspections via sampling in distribution channels or from work sites can be conducted at LNE's request, particularly following observations made during audits or at the recommendation of the Mark Committee.

For pipes and fittings, the tests performed on each sampled product are the LOI test and expansion test.

For coated textile supports, the tests performed on each sampled product are the electric burner test.

The products purchasing costs, sampling and test expenses are paid for by the holder.

#### **4.1.4. COMPLAINTS**

If there are user complaints, the inspections may include sampling or tests at the places where accepted products are marketed or used (in this case the holder is invited to arrange for representation during the sampling and tests).

#### **4.1.5. REPORTING TO THE MARK COMMITTEE**

A summary of all the inspections carried out is presented by LNE at least once a year to the Mark Committee.

The documents examined during each session of the Mark Committee must be presented in anonymous form.

Sanctions may be proposed by the Mark Committee if necessary.

#### **4.1.6. DECISION AND NOTIFICATION**

On the basis of the inspection results and any proposals from the Mark Committee, LNE notifies the holder of one of the following decisions:

- a) Maintaining the certification with a possible request for corrective action.
- b) Maintenance of certification, with formal notification to stop any infringements observed, within a given time period, possibly accompanied by increased inspections, tests and audits (which may be unannounced).
- c) Suspension of certification (the maximum suspension timeframe is 6 months, renewable once; after this, withdrawal of the certification is pronounced.)
- d) Removal of certification.

For sanctions b), c) and d), the fees for additional verifications are charged to the holder, regardless of their results. The decisions are enforceable as from the date of notification.

If there is a serious breach of the Certification Rules, LNE may, as a precautionary measure and after confirmation of the breach, make any of the decisions listed above. The decisions are reported to the Mark Committee.

Certificates are renewed by periods of 3 years.

When the decision is taken before the certificate expires, the renewed certificate has duration of more than 3 years.

#### **4.1.7. APPEAL AGAINST A DECISION**

The holder may appeal against the decision taken. The procedure is set out in Article 11 of the General Rules of the NF Mark. This appeal should be made by recorded delivery letter with acknowledgement of receipt within 15 working days.

LNE firstly proceeds with the re-examination of the file in view of the factors justifying this challenge. It notifies confirmation of the decision or the new decision to the applicant within 30 working days.

Should the applicant wish to maintain its challenge, an appeal may be made by the applicant or certification beneficiary against the decision of LNE.

Explanations for this appeal against the decision of LNE, which does not have a suspensive effect, must be given. It is lodged by sending a recorded delivery letter within 15 working days.

It is examined by LNE within 30 days of receipt and, if it concerns the certification decision or specific certification rules, gives rise to an examination by the Mark committee. LNE informs the plaintiff, within this time limit, as to whether or not it maintains its decision.

If the appeal is maintained after processing and submission to the mark committee for their opinion, the appeal is presented to the Certification and Impartiality Preservation Committee of LNE, which proposes its conclusions after examination.

This last appeal is subject to a lump-sum payment by the applicant.  
The final decision is notified to the Company by LNE.

## **4.2. MODIFICATION AND CHANGES TO COMPANY ORGANISATION OR CERTIFIED PRODUCT**

### **4.2.1. MODIFICATION CONCERNING THE HOLDER**

In the case of merger, liquidation or acquisition of the holder's company, any right to use the Mark that it might exercise shall cease automatically (see article 4 of the General Rules of the NF Mark). The holder must inform LNE without delay of any decision likely to result at a later stage either in a modification of the company's legal status or a change in the company name.

Non-compliance with this obligation observed by LNE can lead to suspension or withdrawal of the right to use the NF mark.

LNE is empowered, after consulting the Mark Committee if necessary, to examine the means by which any new application might be accepted.

In case of merger or consolidation involving only a change of company name, without modification of the product, manufacturing process, material and human resources, quality organisation and methods of control, the NF certificate may be updated upon receipt of written notification of the new company name on the company's letterhead paper.

### **4.2.2. MODIFICATION CONCERNING SITES COVERED BY THE CERTIFICATION**

Before total or partial transfer of an activity described in the application file, the holder shall inform LNE in writing of any new arrangements envisaged. From the transfer date, the holder must cease to mention the mark until LNE makes a decision.

LNE's decision comes after an audit of the new site and, where appropriate, presentation to the Mark Committee (maintained certification or investigation of a new application, with reduced or complete tests).

### **4.2.3. MODIFICATION OF THE ACCEPTED PRODUCT - NEW PRODUCTS**

NF certified products shall conform to the technical file that was submitted with the application for acceptance, and shall take into account any observation made when the right to use the Mark was granted.

Consequently, any modification (including modifications concerning the manufacturing and inspection means and the quality management system that could have a determining effect on production conformity) that the holder wishes to make to accepted products must also be communicated to LNE in writing. In addition, the holder shall notify the corresponding "distributor" certificates, if appropriate.

An application for a new type and/or family of production takes the form of an application for extension of the right to use the NF Mark.

The modification is examined on the basis of the table below and cannot be implemented until LNE has given its agreement. LNE must inform the holder of the examination arrangements (acceptance, preliminary inspections or referral to the Mark Committee) within 15 days.

The samples required for carrying out tests are sent by the applicant and under his responsibility, to the Mark laboratory charged with carrying out the tests. They must be marked in a way that allows later authentication and be accompanied by information allowing the material batches used for their manufacture to be identified.

The details of the instruction and the conditions for notification of the change are given for each group of products in the associated Technical Documents.

In the event that the product covered by the request for change has received approval to maintain the right to use the NF mark, the application shall include a new application to maintain that right, jointly signed by the holder and distributor.

#### **4.2.4. TEMPORARY STOPPAGE OF PRODUCTION**

The holder shall keep LNE informed of any temporary stoppage of production of an accepted product family if this is to last at least six months.

The holder must apply for a temporary suspension of the right to use the mark (maximum: 1 year) insofar as he no longer has products bearing the NF mark in stock. After this period, the right of use is withdrawn.

Before expiry of the suspension, if production is restarted, the holder must notify LNE which will carry out an audit before the products are marketed under the NF Mark.

#### **4.2.5. DEFINITIVE STOPPAGE OF PRODUCTION OR SURRENDER OF THE RIGHT OF USE**

If the holder ceases production of an accepted product definitively or if he surrenders the right to use the Mark, he must inform LNE, indicating the time he considers necessary for depletion of the remaining stock of products bearing the Mark. LNE lays down the conditions under which this stock can be depleted, after seeking the Mark Committee's opinion if necessary.

The certificate issued by LNE remains valid as long as it remains with the holder of NF-marked product stock, as surveillance checks on certified products are maintained.

## **CERTIFICATION RULES**

### **NF MARK - FIRE SAFETY PVC PIPES & FITTINGS – COATED TEXTILE SUPPORTS**

#### **PART 5**

#### **PARTICIPATING ORGANISATIONS**

#### **CONTENTS**

- 5.1. AFNOR Certification**
- 5.2. Mandated body**
- 5.3. Audit bodies**
- 5.4. Test bodies**
- 5.5. Mark committee**

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## 5.1. AFNOR CERTIFICATION

AFNOR is the owner of the NF mark and has granted an exclusive operating licence to AFNOR Certification. AFNOR Certification manages and oversees the NF certification system, which defines the rules of governance and the modalities of operation of the NF mark.

## 5.2. MANDATED BODY

AFNOR Certification entrusts management of the Mark NF513 application to LNE.

Under this authorisation, LNE is answerable to AFNOR Certification for all management operations entrusted to it, as set out in the article 3 of the General Rules of the NF Mark.

All persons involved in the NF mark process are bound to professional secrecy under Article 8 of the General Rules of the NF Mark. If necessary, on request from manufacturers, an agreement can be signed between LNE and the manufacturer.

## 5.3. AUDIT BODIES

LNE entrusts audits to the following organisations:

### **LABORATOIRE NATIONAL DE METROLOGIE ET D'ESSAIS (LNE)**

1, rue Gaston Boissier  
75724 PARIS Cedex 15 - France  
Tel. 01 40 43 37 00

However, it may call upon the expertise of duly qualified external auditors according to LNE's procedures. This outsourcing of audits is formalised in the form of contracts (due to independence and confidentiality requirements).

The holder or applicant must facilitate the operations that agents in charge of audits are required to carry out in the context of their mission.

LNE must be informed of any challenge concerning the members of an audit team within 10 days from when the audit team receives the notification in order for it to be taken into account.

## 5.4. TEST BODIES

LNE entrusts the tests to the trademark laboratory named below:

### **LABORATOIRE NATIONAL DE METROLOGIE ET D'ESSAIS (LNE)**

Direction des Essais (Test Directorate)  
29, avenue Roger Hennequin  
78197 TRAPPES Cedex - France  
Tel. 01 30 69 10 00

## 5.5. MARK COMMITTEE

### 5.5.1. COMMITTEE MEMBERS

A Mark Committee is formed. The members are appointed by LNE after approval by LNE.

The attributions of the mark committee are to:

- give an opinion on the certification rules and their updating
- give an opinion on projects for communication or promotional activities relating to the mark. A special budget, decided each year in discussion with the committee, is set aside for promotional actions
- give an opinion on files presented for certification and in the event of an appeal against a decision.

The committee must give these opinions in compliance with principles of impartiality.

The recommendations of the Mark committee are adopted unanimously unless contrary opinion stated in the minutes.

It can be consulted by LNE on any file within the content of its surveillance activities.

LNE convenes the members of the committee together or informs them in writing at least once a year to present a summary of all the checks performed.

All committee members undertake to:

- contribute their expertise to the operation of the NF mark,
- maintain confidentiality on all information of an individual nature that is provided, and until this publication by AFNOR Certification or LNE,
- attend meetings regularly, and if necessary, regularly inform their deputy, and to communicate all relevant documents,
- contribute to the development of the NF mark – that is to say, promote products or services certified under the mark.

The members have a two-year mandate, renewable by tacit agreement.

In order to preserve the credibility and effectiveness of the committee's work, LNE reserves the right to terminate a member's mandate in the following cases:

- non-compliance with the confidentiality agreement,
- repeated unjustified absences from committee meetings,
- failure, in general, to comply with the above commitments.

The chairman of the mark committee is appointed under the same conditions, after consulting the mark committee. He or she coordinates the committee and searches for consensus. The rule is alternation between the colleges. However, the mandate of the chairman may be extended by one or more years if no candidate representing another college presents himself.

Members of the mark committee exercise their functions on a strictly individual basis. However, if a member is absent, a proxy is appointed by LNE.

LNE draws up the minutes of comments and proposals made during a committee meeting. These minutes are sent to all members of the mark committee.

If necessary LNE invites AFNOR Certification to take part in committee meetings.

Within the context of the revision of these certification rules, LNE organises the consultation and validation of the certification reference standard (in consultation with AFNOR Certification as a participating party).

### **5.5.2. MEMBERS OF THE COMMITTEE**

1 Chairman (appointed by the Committee members).

1 Vice-Chairman:

1 Representative of the authorised body: LNE - Pôle Certification Environnement Sécurité et Performance (Environment, Safety and Performance Certification Division).

#### **(3 to 8) Manufacturers of which:**

2 to 6 Representatives of PVC pipe and fittings manufacturers.

1 Representative of manufacturers of coated textile supports

1 Representative of the STR/PVC (PVC Pipe and Fittings Trade Union).

#### **(1 to 3) Users, consumers, prescribers**

1 to 3 Representatives of users, consumers, prescribers.

#### **(4 to 5) Experts, technical bodies and Administration including:**

1 Standardisation Representative.

1 Representative of the testing laboratory.

1 Expert in the field of fire.

1 Representative of the Ministry of the Interior - Department of Defence and Civil Safety.

### **5.5.3. WORK GROUP**

To manage certain non-recurrent tasks of a technical nature not requiring the convening of the members of the mark committee, a sub-committee or work group can be created, its members being appointed in person and chosen from the members of the mark committee.

Professionals or other persons may be called in from outside.

The missions of this work group are specified by the mark committee; its powers are generally limited to preparing projects or proposals, or to supplying additional information on a given subject on behalf of the Mark committee.



## **CERTIFICATION RULES**

### **NF MARK - FIRE SAFETY PVC PIPES & FITTINGS – COATED TEXTILE SUPPORTS**

#### **PART 6**

#### **APPLICABLE FEES – TERMS OF PAYMENT**

#### **CONTENTS**

- 6.1. Applicable fees**
- 6.2. Terms of payment**

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## **6.1. APPLICABLE FEES**

### **6.1.1. FEES**

Fees for the services involved in obtaining certification and surveillance of certified products are indicated in a list of charges which may be revised annually. The list of charges for the current year is sent to all holders of the mark and is openly available on LNE website ([www.lne.fr](http://www.lne.fr)) or on request from LNE.

A special budget, decided each year in discussion with the committee, is set aside for promotional actions.

The fees are given in Euros, excluding tax. With regard to test fees, samples must be delivered to the Mark laboratory carriage-free and customs-cleared if necessary;

### **6.1.2. LIVING AND TRAVELLING EXPENSES ARE INVOICED AS FOLLOWS:**

Accommodation and travel expenses are the responsibility of the applicant or holder as defined in the price list.

### **6.1.3. CANCELLATION OF AN AUDIT**

Cancellation of an audit whose date has been fixed by agreement between LNE and the audited company is invoiced as follows:

- cancellation 15 days to 8 days before the scheduled date: 50% of the audit fee.
- cancellation 7 to 3 days before the scheduled date: 75% of the audit fee.
- cancellation 2 days before the scheduled date: 100% of the audit fee.

Travelling expenses can be invoiced up to 100% if they are not reimbursable or subject to retention/penalties.

## **6.2. TERMS OF PAYMENT**

### **6.2.1. COLLECTING PAYMENT**

The LABORATOIRE NATIONAL DE METROLOGIE ET D'ESSAIS, the mandated body, is empowered to collect all payments.

Invoices issued by LNE must be paid within 45 days.

The applicant or holder must settle these invoices under the terms set out: any failure on the part of the holder will prevent LNE from exercising the inspection and operating responsibilities incumbent on it by virtue of these certification rules.

If the first enforcement order, sent by recorded delivery, does not result in payment of the total amount due within one month, LNE will be entitled to take precautionary measures with regard to the certifications issued under the NF mark, for all the holder's accepted products.

## **6.2.2. OBTAINING THE CERTIFICATION**

The services correspond to examination of the files, the audits and tests, for each application.

The fee for examination of the file is paid as a single sum when the application is filed and covers file examination, presenting the file to the Mark Committee and the contribution to the general management of the mark.

No fees relating to examination of the application can be refunded, regardless of the result of the examination.

## **6.2.3. CERTIFIED PRODUCT SURVEILLANCE**

Invoicing covers the right to use the NF mark, passed on to AFNOR Certification, file monitoring, the audit and tests.

If acceptance is granted during the course of the year, the amounts invoiced correspond to the services provided. File monitoring (technical examination of the file) is invoiced pro rata temporis.

After certification of a product, an annual right to use the NF Mark is invoiced to the holder and paid to AFNOR CERTIFICATION.

This right to use fee is intended to cover:

- general operation of the NF mark (monitoring of bodies in the NF network, management of the NF Mark committee).
- defence of the NF mark: filing and protecting the mark, legal advice, processing of unauthorised use of the NF mark, legal costs.
- contribution to the general promotion of the NF mark.

The amount relative to file monitoring (technical examination of the file) remains due even if the certification is withdrawn following a decision by LNE or at the holder's request.

Inspections continue for as long as stocks of NF-marked products remain at the holder's premises, and the corresponding fees continue to be charged since file monitoring (technical examination of the file) is invoiced pro rata temporis.

## **6.2.4. ADDITIONAL VERIFICATIONS**

Costs resulting from additional verifications resulting from a decision by LNE are payable by the applicant/holder, regardless of the results.